- 1. Introductory Modules
 - 1. <u>Derived copy of Rubrics for Exams and Group Projects in</u> Ethics
 - 2. Reflections on the Nature of Business
- 2. Business and Professional Ethics
 - 1. Theory Building Activities: Mountain Terrorist Exercise
 - 2. <u>Theory Building Activities: "Responsibility and Incident</u> at Morales"
 - 3. <u>Professional Ethics in Puerto Rico: Codes, Problem Solving, and Ethical Dissent</u>
 - 4. <u>Three Frameworks for Ethical Problem-Solving in</u>
 Business and the Professions
- 3. Management and Leadership
 - 1. Ethics of Teamwork
 - 2. Business and Moral Leaders
 - 3. Moral Exemplars in Business and Professional Ethics
 - 4. <u>Different Approaches to Corporate Governance</u>
 - 5. Moral Ecologies in Corporate Governance
 - 6. Corporate Ethics Compliance Officer Report
 - 7. <u>Three Views of CSR (Corporate Social Responsibility)</u>
 - 8. A Short History of the Corporation
- 4. Finance
 - 1. Responsible Choice for Appropriate Technology
- 5. Marketing: Consumer and Green Ethics
 - 1. <u>Approaches in Environmental Ethics For Business and Engineering</u>
 - 2. Ethical Issues in Risk Management for Business
- 6. UPRM Business Administration Statement of Values
 - 1. Value Profile: Justice
 - 2. Value Profile: Responsibility
 - 3. Value Profile: Respect

- 4. <u>Value Profile: Trust</u>5. <u>Value Profile: Integrity</u>

Derived copy of Rubrics for Exams and Group Projects in Ethics This derived copy of "Rubrics for Exams and Group Projects in Ethics" has been created primarily for students in the course, "The Environment of the Organization." Students will be provided with rubrics to help them understand how group and individual work will be graded. It will also provide Jeopardy exercises designed to prepare them for course exams as well as to promote understanding of the cases and the concepts used in this course. Students who have lost their syllabi, will find copies of the most recent versions uploaded as a media file. This module is being developed as a part of an NSF-funded project, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF SES 0551779.

Key to Links

- The first link connects to the Ethics Bowl assignment for engineering and business students. It corresponds with the Ethics Bowl rubric displayed below.
- The second link connects to the module on developing reports on computing socio-technical systems. It outlines an assignment where computing students carry out an analysis of the impact of a computing system on a given socio-technical system. A rubric to this activity used in computer ethics classes is provided below.
- The third link to the Three Frameworks module corresponds to a rubric below that examines how well students deploy the frameworks on decision-making and problem-solving outlined by this module.
- The final link to Computing Cases provides the reader with access to Chuck Huff's helpful advice on how to write and use rubrics in the context of teaching computer ethics.

Introduction

This module provides a range of assessment and study materials used in classes in business, engineering and computer ethics. Rubrics will help you understand the standards that will be used to assess your writing in essay exams and group projects. They also help your instructor stay focused on

the same set of standards when assessing the work of the class. Jeopardy exercises will help focus your study efforts and help you to identify your strengths and weaknesses as you prepare for class exams. A copy of the course syllabus has been included in case you lose the copy given to you in the first class. As the semester progresses, expect this module to change and eventually fulfill the function of serving as a portal to other modules and online materials relevant to this and other classes.

Revised Schedule for Fall 2011

Revised Schedule for Fall 2011 https://cnx.org/content/m36712/

Course Syllabi

Syllabus for Environments of the Organization https://cnx.org/content/m36712/

Syllabus for Business, Society, and Government https://cnx.org/content/m36712/

Environment of the Organization Course Syllabus Spring 2011 https://cnx.org/content/m36712/

Environment of Organization Course Syllabus, Spring 2012, short version

https://cnx.org/content/m36712/

ADMI 4016 Syllabus Fall 2012 Short Form https://cnx.org/content/m36712/

Environment of Organization Syllabus F2012--Long Form https://cnx.org/content/m36712/

Environment of Organization Syllabus Spring 2013 https://cnx.org/content/m36712/

Environment of Organization Syllabus Fall 2013

https://cnx.org/content/m36712/

Environment of Organization Syllabus Spring 2014

https://cnx.org/content/m36712/

Environment of Organization Syllabus Fall 2014

https://cnx.org/content/m36712/

ADMI 4016 Syllabus Spring 2015

https://cnx.org/content/m36712/

ADMI 4016 Syllabus Fall 2015

https://cnx.org/content/m36712/

Environment of Organization Syllabus, Spring 2016

https://cnx.org/content/m36712/

Syllabi for ADMI 3009: Introduction to Business, Management, and Ethics

https://cnx.org/content/m36712/

3009 Syllabus Spring 2017

https://cnx.org/content/m36712/

First Class Presentation

https://cnx.org/content/m36712/

First Class: Student Survey

Directions:

On a sheet of paper answer the following questions. You may write in English or Spanish.

- 1. Your name
- 2. Your area of academic concentration or major

- 3. Reason for taking this course (besides that it may be required for your area)
- 4. Have you studied (business) ethics at this university or another university as (a) a freestanding course, (b) an out-of-curriculum activity (student association), (c) a module, unit or activity integrated into some other course
- 5. How would you define business ethics?
- 6. What do you expect to learn in this course?
- 7. How, at this point, would you rate your communication skills? Beginning, Intermediate, or Advanced?
- 8. How would you rate your abilities in English regarding speaking, understanding, and writing? Beginning, Intermediate, or Advanced?
- 9. Describe what has been your worst experience working in a group or team. Why was it bad, difficult, or unsatisfying?
- 10. What is the best educational experience you have had in the past, i.e., the one from which you have learned the most or learned something that matters greatly to you?

Case Table and Information

Table Outlining Cases and Associated Concepts https://cnx.org/content/m36712/

ADEM Statement of Values

Presentation on Values and Contracts https://cnx.org/content/m36712/

Basic and Intermediate Moral Concepts: Summary Tables

These tables provide summaries of basic moral concepts and intermediate moral concepts. These summaries need to be completed by seeing the concept in a specific case. Basic moral concepts include right, duty, virtue, good, and responsibility. These cut across different practical disciplines in which ethics enters such as business, engineering, and computing. Intermediate moral concepts are specific to a given practical discipline. In

the Environment of the Organization, you will study privacy, intellectual property, free speech, responsibility, safety, corporate social responsibility, and responsible dissent. Privacy will be introduced in Toysmart but continue on through Biomatrix, Therac, Hughes, and Drummond. Free Speech will be explored in terms of transferring information in Toysmart, defamation in Biomatrix, informed consent in Therac, and responsible dissent in Hughes. These tables provide summaries to get you started on the concepts but a full understanding requires you see them in the context of a specific case.

Basic Moral Concepts for Business

https://cnx.org/content/m36712/

Intermediate Moral Concepts for Business

https://cnx.org/content/m36712/

Rubrics Used in Connexions Modules Published by Author

Ethical Theory Rubric

This first rubric assesses essays that seek to integrate ethical theory into problem solving. It looks at a rights based approach consistent with deontology, a consequentialist approach consistent with utilitarianism, and virtue ethics. The overall context is a question presenting a decision scenario followed by possible solutions. The point of the essay is to evaluate a solution in terms of a given ethical theory.

Ethical Theory Integration Rubric

https://cnx.org/content/m36712/

This rubric breaks down the assessment of an essay designed to integrate the ethical theories of deontology, utilitarianism, and virtue into a decision-making scenario.

Decision-Making / Problem-Solving Rubric

This next rubric assess essays that integrate ethical considerations into decision making by means of three tests, reversibility, harm/beneficence, and public identification. The tests can be used as guides in designing ethical solutions or they can be used to evaluate decision alternatives to the problem raised in an ethics case or scenario. Each theory partially encapsulates an ethical approach: reversibility encapsulates deontology, harm/beneficence utilitarianism, and public identification virtue ethics. The rubric provides students with pitfalls associated with using each test and also assesses their set up of the test, i.e., how well they build a context for analysis.

Integrating Ethics into Decision-Making through Ethics Tests https://cnx.org/content/m36712/

Attached is a rubric in MSWord that assesses essays that seek to integrate ethical considerations into decision-making by means of the ethics tests of reversibility, harm/beneficence, and public identification.

Ethics Bowl Follow-Up Exercise Rubric

Student teams in Engineering Ethics at UPRM compete in two Ethics Bowls where they are required to make a decision or defend an ethical stance evoked by a case study. Following the Ethics Bowl, each group is responsible for preparing an in-depth case analysis on one of the two cases they debated in the competition. The following rubric identifies ten components of this assignment, assigns points to each, and provides feedback on what is less than adequate, adequate, and exceptional. This rubric has been used for several years to evaluate these group projects In-Depth Case Analysis Rubric

https://cnx.org/content/m36712/

This rubric will be used to assess a final, group written, in-depth case analysis. It includes the three frameworks referenced in the supplemental link provided above.

Rubric for Good Computing / Social Impact Statements Reports

This rubric provides assessment criteria for the Good Computing Report activity that is based on the Social Impact Statement Analysis described by Chuck Huff at www.computingcases.org. (See link) Students take a major computing system, construct the socio-technical system which forms its context, and look for potential problems that stem from value mismatches between the computing system and its surrounding socio-technical context. The rubric characterizes less than adequate, adequate, and exceptional student Good Computing Reports.

Good Computing Report Rubric https://cnx.org/content/m36712/

This figure provides the rubric used to assess Good Computing Reports in Computer Ethics classes.

Computing Cases provides a description of a Social Impact Statement report that is closely related to the Good Computing Report. Value material can be accessed by looking at the components of a Socio-Technical System and how to construct a Socio-Technical System Analysis.

Business Ethics Midterm Rubric Spring 2008

https://cnx.org/content/m36712/

Clicking on this link will open the rubric for the business ethics midterm exam for spring 2008.

Insert paragraph text here.

Study Materials for Environments of Organization

This section provides models for those who would find the Jeopardy game format useful for helping students learn concepts in business ethics and the environments of the organization. It incorporates material from modules in the Business Course and from Business Ethics and Society, a textbook written by Anne Lawrence and James Weber and published by McGraw-Hill. Thanks to elainefitzgerald.com for the Jeopardy template.

Jeopardy: Business Concepts and Frameworks https://cnx.org/content/m36712/

Jeopardy: New Game for First Exam, Spring 2011
https://cnx.org/content/m36712/
https://cnx.org/content/m36712/

Privacy, Property, Free Speech, Responsibility https://cnx.org/content/m36712/

Jeopardy for EO Second Exam https://cnx.org/content/m36712/

Jeopardy 5 https://cnx.org/content/m36712/

Jeopardy 6 https://cnx.org/content/m36712/

Jeopardy7

https://cnx.org/content/m36712/

Jeopardy on Responsibility

https://cnx.org/content/m36712/

Revised Jeopardies for ADMI 4016, Fall 2011 to Present

Jeopardy for Problem Solving

https://cnx.org/content/m36712/

Jeopardy for Toysmart, Privacy, Property, and Informed Consent https://cnx.org/content/m36712/

Jeopardy and Gilbane Gold https://cnx.org/content/m36712/

More Jeopardies: Beginning Fall 2012

Jeopardy on Syllabus as Contract, Mountain Terrorist Exercise, and Values-Based Decision-Making https://cnx.org/content/m36712/

Reflections on the Nature of Business

This module explores the notion of business by looking at business as a practice, profession, or an organization designed to collectively bargain for the self-interest of its members. This focus is introductory and no effort is made to emerge with the definitive definition of business. Rather, students are encouraged to examine critically two related and critical views of business: Aristotle's view and that of Elijah Jordan. This module has been developed for ADMI 3009, Introduction to Business, Management, and Ethics, a new required course being taught at the University of Puerto Rico at Mayaguez. It is also designed to introduce content into the UPRM STEM curriculum as outreach for the NSF grant, NSF 1449489, Cultivating Responsible Wellbeing In STEM: Social Engagement Through Personal Ethics. Finally, this module will become part of the EAC Toolkit (NSF 0551779) and the UPRM CIVIS Collection.

Introduction

What is business? This is a good way to start our inquiry this semester into Business, Management, and Ethics. How do we go about characterizing business? How do we best conduct the practice and profession of management to bring about success in the practice of business? And what is the role of ethics in business? Can we, to take one of many problems, reconcile the practice of business whose success requires fierce competition with the demands of fundamental ethical approaches which outline parameters of social and professional cooperation?

Different Ways We Can Define Business

The problem here is that it would be nice in a course of this nature to start with a clear definition of business to help focus and orient our activities and inquiries. But not only is business notoriously difficult to define, but it is also no simple matter to reach an agreement on what is meant by activity of defining. There are at least three ways of defining business:

Classifying Business as a Practice

(1) First, there are definitions that define by classification. Robert Solomon defines business as a practice; in other words, he locates business within the

larger category of practice along with other practices such as governing and teaching. (See Solomon, Ethics and Excellence: Cooperation and Integrity in Business. Oxford: UK: Oxford University Press, 1993.) But any definition by classification which locates the term to be defined within a larger, more general category has to continue by distinguishing the term being defined from other things which fall under the same category. So, for example, in this exercise we will seek to distinguish business from technology as well as government/law. This could continue. How does business relate to and differ from art, engineering, and industry? Is business a profession or is it a non-professional activity? Does the practice of business admit of unions, that is, of organizations that collectively bargain with other organizations to promote the welfare and interests of their members. (Note: According to Solomon, a practice has several different characteristics: (1) it has goods internal to the practice that give focus to its activities; (2) the practice as a whole is justified by external goods, especially common or universal goods; (3) within the practice, individuals carry out different and specific roles that are coordinated in such a way that they complement one another; (4) a practice has more or less specific boundaries that serve to distinguish it from other practices. MacIntyre also gives a similar analysis of a practice in his book After Virtue.)

What the Dictionary Has to Say

- (2) Second, there are definitions that capture the essence of a concept in a concise, verbal formula. The Random House Dictionary, in its second, economic definition (the first classifies business as an occupation or profession), states that business is "the purchase and sale of goods in an attempt to make a profit." (Random House Revised Dictionary, 1979). Making a profit from the purchase and sale of goods, thus, represents in a concise formula the essence of business according to the editors of this dictionary.
- (2a) Looking briefly at the first dictionary definition of business as a profession, one could ask whether this line of inquiry has any payoff. A profession is a collective organization that seeks to develop, preserve, and transmit specialized knowledge that helps bring about social, public, or common goods. Thus, medicine is a profession that is devoted to developing, practicing, preserving, and transmitting knowledge about how

to promote the common good of human health. Professions serve broader social goods while unions engage in collective bargaining for the benefit of their membership. Strong arguments can be made that professions are kinds of practices, but practice is the broader category so there are practices that are not professions. A controversial issue in Business Administration studies is whether business itself is a profession. If so, then this would imply that business represents an organized body of knowledge and an inquiry guided by explicit, agreed-upon disciplinary aims.

A Functional Definition of Business

(3) In the third sense, we can define a term by highlighting the function it plays within a larger context. This functional sense of definition leads us to ask what function (or purpose) does business play out in the larger context of society. This definition has the advantage of also serving to justify business; if the function business plays in society contributes to the wellbeing of society, if business brings about important, common goods that strengthen society, then it plays an essential role in society and is, therefore, justified. So, for example, one of the key functions of business is to promote a fair, free, and mutually beneficial exchange of goods and services. To do this, business makes use of the mechanisms of the free market such as the laws of supply and demand. Hence the primary way in which it distributes goods and services is by pricing these on the free market. The market balances the demand for goods with the supply of these goods in such a way as to maximize efficiency and productivity. So the function of business within society is to bring about an efficient and productive exchange of goods and services. In this way, it is justified as an efficient and productive exchange and distribution of goods and services. This argues forcefully that business serves the common good of society.

Critical Views of Business: Aristotle and Jordan

Now, we turn to critics of business, starting with the ancient Greek philosopher, Aristotle. In general Athenian society saw business practitioners as "barbaroi". This word plays on how the language spoken by Persian traders in the Athenian marketplace or Agora sounded to Greek speakers. Traders and business practitioners were thus foreigners and not true Athenian citizens. The location of the marketplace or Agora in ancient

Athens tells the whole story. At the top of Athens is the Parthenon where the citizens (all men) carried out the political deliberation necessary to run Athens. Quite further downhill were the Barbaroi who did their work in the Agora. The physical setup here embodied the social hierarchy. The only social groups below the Barbaroi were women and slaves. So business was, in general, looked down upon in ancient Athens. I have quoted two translations of the key passage where Aristotle classifies and criticizes the practice of business:

Aristotle, Politics, Book 1, Chapter 10

"There are two sorts of wealth-getting...; one is a part of household management, the other is retail trade: the former necessary and honourable, while that which consists in exchange is justly censured; for it is unnatural, and a mode by which men gain from one another. The most hated sort, and with the greatest reason, is usury, which makes a gain out of money itself, and not from the natural object of it. For money was intended to be used in exchange, but not to increase at interest. And this term interest, which means the birth of money from money, is applied to the breeding of money because the offspring resembles the parent. Wherefore of all modes of getting wealth this is the most unnatural." **Translation by Jowett in The Basic Works of Aristotle, Richard McKeon, editor. Random House, 1941.**

Barker's translation

Ernest Barker also translates this passage in The Politics of Aristotle. Edited and translated by Ernest Barker. Oxford, UK: Oxford University Press, 1946/1978: 28-29. (I will quote a bit more extensively from Barker) "On a general view, as we have already noticed, a supply of property should be ready to hand [as a provision of nature]. It is the business of nature to furnish subsistence for each being brought into the world; and this is shown by the fact that the offspring of animals always gets nourishment from the residuum of the matter that gives it its birth. The natural form, therefore, of the art of acquisition is always, and in all cases, acquisition from fruits and animals. That art, as we have said, has two forms: one which is connected with retail trade, and another which is connected with the management of the household. Of these two forms, the latter is necessary and laudable; the former is a method

of exchange which is justly censured, because the gain in which it results is not naturally made [from plants and animals], but is made at the expense of other men. The trade of the petty usurer [the extreme example of that form of the art of acquisition which is connected with retail trade] is hated most, and with most reason; it makes a profit from currency itself, instead of making it from the process [i.e., of exchange] which currency was meant to serve. Currency came into existence merely as a means of exchange; usury tries to make it increase [as though it were an end in itself]. This is the reason why usury is called by the word we commonly use...; for as the offspring resembles its parent, so the interest bred by money is like the principal which breeds it, and [as a son is styled by his father's name, so] it may be called 'currency the son of currency'. Hence we can understand why, of all modes of acquisition, usury is the most unnatural." 28-9

What do you think?

- Aristotle writes from a time very different from our own. Do you think this makes a difference in his appraisal of business? Do we and Aristotle mean the same thing by business?
- Aristotle focuses on the practice of usury. This is a very common practice in our time but was opposed for quite some time by Christianity. (Aquinas brought this and other views of Aristotle into the Christian religion.) Usury is also opposed by Muslims. See Planet Money for more information. (Episode 701: A Bank Without Interest.)
- What, for Aristotle, is wrong with making money from money? What exactly is money for Aristotle?.
- What do you think Aristotle would think of misers? (Are they good or bad for Aristotle?) How do you think he would define a miser?

Elijah Jordan: Business Be Damned

Business has been disparaged by other philosophers. Nietzsche once called England a nation of shopkeepers and offered this label in a sarcastic and disparaging way. Elijah Jordan, a professor in philosophy at Butler University in the first part of the 20th century, wrote Business Be Damned to respond to Vanderbilt's outburst that the "public be damned." (The railroad tycoon was railing against attempts by government to regulate his railroad companies for the public good.) In Business Be Damned, Jordan

distinguishes between business and industry, ascribing only to the latter a productive function that allows it to contribute to the public good. Business, on the other hand, is parasitic; it feeds off the productive activity of engineering and industry; it restricts itself to making deals and taking its cut in exchange for make deals, i.e., exchanging goods in the marketplace. Because business makes no productive contribution, it continually pulls the productive activities of engineering and industry down into meaningless, abstract financial transactions. Again, in line with Aristotle, business produces money but money is an abstraction, merely a signal of the exchange value of something in the marketplace. The following is taken from William Frey. "Business Ethics: Myths and Strategies for Implementation." Interdisciplinary Humanities Vol XI, Number 4: 44-45. "The basis of this hostility toward business is yet another myth: business as the great corrupter. It comes from Aristotle (Politics: 1258b) who describes business as a harmful activity which takes useful objects out of their natural context and treats them as abstractions in the process of exchange. A more recent version of this Aristotelian approach comes from a fascinating (and little read) critic of business, Elijah Jordan, who summarized his views in a book entitled, Business Be Damned." (Jordan, Elijah. Business Be Damned. New York: Henry Schuman, 1952.)

Business and Industry

"To understand Jordan's position we need to explore his description of the relation between business and industry. Strictly speaking, business seeks to control the exchange of products and services that result from industrial activity. The business practitioner achieves this end by converting the concrete value of the industrial product into an abstraction by eliminating from it all but one of its aspects, its price or exchange value. In this way, business diverts industrial activity from serving the public good to serving the private and exclusive aims of the entrepreneur."

Business as Parasite

"Jordan views industry as beneficial, social activity that arises naturally from the human tendency to form organizational systems that focus and coordinate individuals and their actions. [These are corporations.] Such organizations can realize complicated, intersubjective and public purposes beyond the power of human individuals acting alone. Business makes use of these organizational systems and their products but also perverts them by bending them to the merely private aims of the entrepreneur. To put it bluntly, business lives as a parasite off the knowledge, skills, technology and products of industrial activity; it contributes nothing to its victim, and if allowed to feed unchecked, eventually consumes it."

Business and The Borg

Jordan would have readily identified the business practitioners of his era (the first part of the 20th century) with the Borg portrayed in Star Trek: The New Generation. Just as the Borg feed off of and consume the technology developed by other worlds, the financial sector feeds off the creativity, ingenuity, and productiveness of corporations organized to produce useful products and services: automobile manufacturers, designers and makers of television sets, and producers and distributors of telephones. Industry contributes positively while business merely exploits and consumes what others have created.

Solomon's More Positive View: Business as a Practice

I suspect that you will conclude that Aristotle and Jordan distort both the descriptive and normative senses of business. But I urge you to go beyond this view and search for the social, political, and ethical truths hiding beneath the surface. More balanced views can be gleaned from business ethicists such as Manuel Velasquez and Robert Solomon, both first generation business ethicists in the United States. Solomon, especially, identifies business—at its best—as a legitimate and powerful way of pursuing human excellence. As stated earlier, Solomon sees business as a practice whose internal goods (pursuing profits) match up nicely with external goods beneficial to society such as distributing the goods and services essential to society in efficient, productive, and safe ways.

Sources

- Robert C. Solomon. Ethics and Excellence: Cooperation and Integrity in Business. Oxford, UK: Oxford University Press, 1993: 118-124.
- Elijah Jordan. Business Be Damned. New York: Henry Schuman, 1952.
- Aristotle. Politics. Translated by Jowett. Basic Works of Aristotle. Ed: Richard McKeon. Random House, 1941.

• Aristotle. Politics. Translated by Ernst Barker. Oxford, UK: Oxford University Press, 1946/1978.

What You Will Do

The following in-class activity will help us to begin our semester long reflection on the nature and practice of business.

- Group 1 will focus on Technology. What does business have to do with technology? Do engineers design technical artifacts while business practitioners market and sell these artifacts in various economic markets?
- Group 2 will focus on the Government/Law. Many U.S. (and Puerto Rican) politicians claim that business is over-regulated. What is the relation between business and government? How does business constrain what government can do? How does government constrain or limit business activities?
- Group 3 will look at the relation between business managers and the shareholders or stockholders of the business organization. What are shareholder responsibilities to the businesses in which they hold stock? What are manager (and employee) responsibilities to shareholders.
- Group 4 will look at the relation between business managers and their employees. Do employees have any rights? What are some of these? Is ascribing rights to employees politicizing the business firm, that is, reducing the economic sphere to the political sphere?
- Group 5 will look at the relation between a business firm and its customers or clients? For example, do customers or clients have any rights? If the relation were contractual, would any rights or duties be required to make sure the contractual associations were "legitimate."
- Group 6 will explain and examine impartially the claim that business ethics is an oxymoron. What is an oxymoron? Is it difficult (or impossible) to be ethical and, at the same time, be successful in business?

Something Interesting

Listen to Planet Money and find out about an attempt to build a modern bank that lends money but does not charge interest. Is it possible to set up a viable bank without interest or are the attempts described in Planet Money just "smoke and mirrors". Visit http://www.npr.org/sections/money/ and look for Episode 701: A Bank Without Interest.

Theory Building Activities: Mountain Terrorist Exercise

This exercise, based on Bernard Williams' "Jim and the Jungle" scenario, helps students see the way they use ethical theories in their everyday reasoning. Williams' scenario is constructed as a classical dilemma--a no win situation that offers two courses of action both of which are bad. While Williams' intention was to criticize deontological and utilitarian ethical approaches for undermining personal integrity, this reformulation of the scenario into that of the Mountain Terrorist Exercise provides a ready means of distinguishing the ethical approaches of virtue, deontology, and utilitarianism. Students discuss the exercise. The instructor then shows how the different positions set forth fall under certain ethical categories. This debriefing can then be followed by a formal presentation that sets forth these three ethical theories in terms of their similarities and their differences. This module is being developed as a part of an NSF-funded project, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF SES 0551779.

Module Introduction

This module poses an ethical dilemma, that is, a forced choice between two bad alternatives. Your job is to read the scenario and choose between the two horns of the dilemma. You will make your choice and then justify it in the first activity. In the second activity, you will discuss your choice with others. Here, the objective is to reach consensus on a course of action or describe the point at which your group's progress toward consensus stopped. The Mountain Terrorist Exercise almost always generates lively discussion and helps us to reflect on of our moral beliefs. Don't expect to reach agreement with your fellow classmates quickly or effortlessly. (If you do, then your instructor will find ways of throwing a monkey wrench into the whole process.) What is more important here is that we learn how to state our positions clearly, how to listen to others, how to justify our positions, and how to assess the justifications offered by others. In other words, we will all have a chance to practice the virtue of reasonableness. And we will learn reasonableness not when it's easy (as it is when we agree) but when it becomes difficult (as it is when we disagree).

The second half of this module requires that you reflect carefully on your moral reasoning and that of your classmates. The Mountain Terrorist Exercise triggers the different moral schemas that make up our psychological capacity for moral judgment. Choosing one horn of the dilemma means that you tend to favor one kind of schema while choosing the other horn generally indicates that your favor another. The dominant moral theories that we will study this semester provide detailed articulations and justifications of these moral schemas. Reflecting on your choice, the reasons for your choice, and how your choice differs from that of your classmates will help you get started on the path of studying and effectively utilizing moral theory.

The following scenario comes originally from the philosopher, Bernard Williams. It is also presented in introductory ethics textbooks (such as Geoffrey Thomas' An Introduction to Ethics). The first time this module's author became aware of its use in the classroom was in a workshop on Agriculture Ethics led by Paul Thompson, then of Texas A&M University, in 1992.

Moral Theories Highlighted

- 1. Utilitarianism: the moral value of an action lies in its consequences or results
- 2. Deontology: the moral value of an action lies, not in its consequences, but in the formal characteristics of the action itself.
- 3. Virtue Ethics: Actions sort themselves out into virtuous or vicious actions. Virtuous actions stem from a virtuous character while vicious actions stem from a vicious or morally flawed character. Who we are is reveals through what we do.

Mountain Terrorist Scenario

You are in a remote mountain village. A group of terrorists has lined up 20 people from the village; they plan on shooting them for collaborating with the enemy. Since you are not from the village, you will not be killed. Taking advantage of your position, you plead with the terrorists not to carry out their plan. Finally, you convince the leader that it is not necessary to kill all 20. He takes a gun, empties it of all its bullets except one, and then hands it to you. He has decided to kill only one villager to set an example to the rest. As an honored guest and outsider, you will decide who will be killed, and you will carry out the deed. The terrorists conclude with a warning; if you refuse to kill the villager, then they will revert back to the original plan of killing all 20. And if you try any "funny business," they will kill the 20 villagers and then kill you. What should you do?

Your Options

- 1. Take the gun, select a villager, and kill him or her.
- 2. Refuse the terrorists' offer and walk away from the situation.

Spanish Translation by Dr. Halley Sanchez

El Terrorista de la Montaña Tú eres un antropólogo que por un mes ha estado viviendo con y observando (o sea, estudiando) a los residents de una aldea en una area remota montañoza de un pais en América Latina. El día que te dispone irte de la aldea, aprece un grupo de hombres armados que reúnen a los aldeanos y les anuncian que se han enterado de que ellos han estado cooperando con el gobierno represivo y que, como lección, han de ejecutar viente de ellos. El líder de los terroristas te mira y te dice que tú te puedes ir, ya que no estás involucardo en la lucha patriótica y que ellos no están en la costumbre de tomar rehénes extranjeros. Debido a que te da la impresión de que el líder de los supuestos patriótas (terroristas?) es un hombre educado, tú te atreves tratar de razonar con él. Le explica que llevas un mes en la aldea y que los aldeanos no han cooperado de forma volutaria con el gobierno. Sí, por supuesto, las tropas del gobierno pasaron por la aldea y confiscaron algunas provisiones, pero los aldeanos no se las dieron libremente sino que estaban indefenso y no podieron prevenir que le confiscaran las mismas. El líder piensa un tiempo y te dice que por tú ser forastero y obviamente un antropólogo estudioso, te va a dar el benificio de la duda, y que por tanto no van a ejecutar viente aldeanos. Pero dado que la lucha patriótica está en un proceso crítico y que la aldea sí le proveyó provisiones al gobierno, por el bien de la lucha patriótica y el bien de la humanidad, es menester darle una lección a la aldea. Así que tan sólo han de ejecutar un aldeano. Más, como huesped, tú has de escoger quién ha de morir y tú has de matarlo tú

mismo. Te da una pistola con una sola bala y te dice que proceda, mientras que a la vez te advierte que de tratar algo heroico, te ejecutarán inmediatamente y procederán a ejecutar a los viente aldeanos como dijeron al comienzo. Tú eres el antropólogo. ¿Qué harás?

Activity 1

In a short essay of 1 to 2 pages describe what you would do if you were in the position of the tourist. Then justify your choice.

Activity 2

Bring your essay to class. You will be divided into small groups. Present your choice and justification to the others in your group. Then listen to their choices and justifications. Try to reach a group consensus on choice and justification. (You will be given 10-15 minutes.) If you succeed present your results to the rest of the class. If you fail, present to the class the disagreement that blocked consensus and what you did (within the time limit) to overcome it.

Taxonomy of Ethical Approaches

There are many ethical approaches that can be used in decision making. The Mountain Terrorist Exercise is based on an artificial scenario designed to separate these theoretical approaches along the lines of the different "horns" of a dilemma. Utilitarians tend to choose to shoot a villager "in order to save 19." In other words they focus their analysis on the consequences of an action alternative and choose the one that produces the least harm. Deontologists generally elect to walk away from the situation. This is because they judge an action on the basis of its formal characteristics. A deontologist might argue that killing the villager violates natural law or cannot be made into a law or rule that consistently applies to everybody. A deontologist might say something like, "What right do I have to take another person's life?" A virtue ethicists might try to imagine how a person with the virtue of courage or integrity would act in this situaiton. (Williams claims that choosing to kill the villager, a duty under utilitarianism, would undermine the integrity of a person who abhorred killing.)

Table Connecting Theory to Domain

- 1. Row 1: Utilitarianism concerns itself with consequences. It claims that the moral value of an action is "colored" by its results. The harm test, which asks us to choose the least harmful alternative, encapsulates or summarizes this theoretical approach. The basic principle of utilitarianism is the principle of utility: choose that action that produces the greatest good for the greatest number. Utilitarians would shoot a villager in order to save 19. But Utilitarianism, like other forms of consequentialism, has prediction challenges. What are the short-, middle-, and long-term consequences of an action? These become harder to determine the further we are from the present.
- 2. Row 2: Npn-consequentialism turns away from consequences to focus on the formal characteristics of an action. (For example, Kant says the good action is one that does duty for duty's sake.) Deontology, a kind of non-consequentialism, helps us to identify and justify rights along with their correlative duties The reversibility test summarizes deontology by asking the question, "Does your action still work if you switch (=reverse) roles with those on the receiving end? Deontology has two formulations of its fundamental principle. The **Categorical Imperative** exhorts us to act only on that

- maxim which can be converted into a universal law. The **Formula of the End** proscribes that we "treat others always as ends, never merely as means," The rights that represent special cases of treating people as ends and not merely as means include (a) informed consent, (b) privacy, (c) due process, (d) property, (e) free speech, and (f) conscientious objection. The deontologist would choose not to kill a villager because the act of killing is formally wrong.
- 3. Row 3: Virtue ethics turns away from the action and focuses on the agent, the person performing the action. The word, "Virtue," refers to different sets of skills and habits cultivated by agents. These skills and habits, consistently and widely performed, support, sustain, and advance different occupational, social, and professional practices. (See MacIntyre, After Virtue, and Solomon, Ethics and Excellence, for more on the relation of virtues to practices.) The public identification test summarizes this approach: an action is morally acceptable if it is one with which I would willingly be publicly associated given my moral convictions. Individual virtues that we will use this semester include integrity, justice, responsibility, reasonableness, honesty, trustworthiness, and loyalty.
- These different approaches are meant to work together. Each gives us insight into
 different dimensions of the problematic situation. Utilitarianism and deontology both
 focus on the action. Utilitarianism uses consequences to evaluate the action while
 deontology evaluates an action in terms of its underlying motive and its formal
 characteristics.
- Virtue ethics turns away from the action to focus on the agent. It asks us to determine what the action says about the character or person of the agent. If the action is irresponsible, then the agent is irresponsible. Virtue ethics can be implemented by projecting a moral exemplar into the situation. You might ask, "What would so-and-so do in this situation?" if this person were your mentor, a person you admire, or a moral exemplar. Or you might examine virtues that are realized through your action. For example, Williams says that taking the life of a villager might seriously disrupt or corrupt your integrity.
- The capability approach takes a still different focus on the situation by having us bring into view those factors in the situation which could empower or impede the expression of human capabilities like thought, imagination, movement, health, and life.

Theory Category	Ethical Approach	Ethics Test	Basic Principles	Action in MT Scenario
Consequentialism	Utilitarianism	Harm Test	Principle of Utility: greatest	Shoot 1 villager

			good for greatest number	to save 19
Non- consequentialism	Deontology: right theory or duty theory	Reversibility Test: view action from receiving end	Categorical Imperative: act on maxim which can be universal law; Formula of end: treat persons as ends, not merely as means	Do not take gun; leave village
Character-Based	Virtue Ethics	Publicity Test	Virtue is the means between extremes of excess and defect	Do the honorable thing
Human Functioning	Capability Approach	Check if action expands or contracts substantive freedoms	Substantive freedoms composing a life of dignity; beings and doings essential to eudaimonia	Choose that action that expands freedom and secures dignity

Covering All the BasesTable 1

Comments on the Relation Between Ethical Approaches

The Mountain Terrorist Exercise has, in the past, given students the erroneous idea that ethical approaches are necessarily opposed to one another. As one student put it, "If deontology tells us to walk away from the village, then utilitarianism must tell us to stay and kill a villager because deontology and utilitarianism, as different and opposed theories, always reach different and opposed conclusions on the actions they recommend." The Mountain Terrorist dilemma was specially constructed by Bernard Williams to produce a

situation that offered only a limited number of alternatives. He then tied these alternatives to different ethical approaches to separate them precisely because in most real world situations they are not so readily distinguishable. Later this semester, we will turn from these philosophical puzzles to real world cases where ethical approaches function in a very different and mostly complimentary way. As we will see, ethical approaches, for the most part, converge on the same solutions. For this reason, this module concludes with 3 metatests. When approaches converge on a solution, this strengthens the solution's moral validity. When approaches diverge on a solution, this weakens their moral validity. A third metatest tells us to avoid framing all ethical problems as dilemmas (=forced choices between undesirable alternatives) or what Carolyn Whitbeck calls "multiple-choice" problems. You will soon learn that effective moral problem solving requires moral imagination and moral creativity. We do not "find" solutions "out there" ready made but design them to harmonize and realize ethical and practical values.

Meta-Tests

- Divergence Test: When two ethical approaches differ on a given solution, then that difference counts against the strength of the solution. Solutions on which ethical theories diverge must be revised towards convergence.
- Convergence Test: Convergence represents a meta-test that attests to solution strength. Solutions on which different theoretical approaches converge are, by this fact, strengthened. Convergence demonstrates that a solution is strong, not just over one domain, but over multiple domains.
- Avoid Framing a Problem as a Dilemma. A dilemma is a no-win situation that offers only two alternatives of action both of which are equally bad. (A trilemma offers three bad alternatives, etc.) Dilemmas are better dissolved than solved. Reframe the dilemma into something that admits of more than two no-win alternatives. Dilemma framing (framing a situation as an ethical dilemma) discourages us from designing creative solutions that integrate the conflicting values that the dilemma poses as incompatible.

Module Wrap-Up

1. Reasonableness and the Mountain Terrorist Exercise. It may seem that this scenario is the last place where the virtue of reasonableness should prevail, but look back on how you responded to those of your classmates who chose differently in this exercise and who offered arguments that you had not initially thought of. Did you "listen and respond thoughtfully" to them? Were you "open to new ideas" even if these challenged your own? Did you "give reasons for" your views, modifying and shaping them to respond to your classmates' arguments? Did you "acknowledge mistakes and misunderstandings" such as responding critically and personally to a classmate who put forth a different view? Finally, when you turned to working with your group, were you able to "compromise (without compromising personal integrity)"? If you did any or all of these things, then you practiced the virtue of reasonableness as characterized by Michael Pritchard in his book, Reasonable Children: Moral Education and Moral Learning (1996, University of Kansas Press, p. 11). Congratulate yourself on exercising reasonableness in an exercise designed to challenge this virtue. You passed the test.

- 2. Recognizing that we are already making ethical arguments. In the past, students have made the following arguments on this exercise: (a) I would take the gun and kill a villager in order to save nineteen; (b) I would walk away because I don't have the right to take another's life; (c) While walking away might appear cowardly it is the responsible thing to do because staying and killing a villager would make me complicit in the terrorists' project. As we discussed in class, these and other arguments make use of modes of thought captured by ethical theories or approaches. The first employs the consequentialist approach of utilitarianism while the second makes use of the principle of respect that forms the basis of our rights and duties. The third works through a conflict between two virtues, courage and responsibility. This relies on the virtue approach. One accomplishment of this exercise is to make you aware of the fact that you are already using ethical arguments, i.e., arguments that appeal to ethical theory. Learning about the theories behind these arguments will help you to makes these arguments more effectively.
- 3. **Results from Muddy Point Exercises** The Muddy Point Exercises you contributed kept coming back to two points. (a) Many of you pointed out that you needed more information to make a decision in this situation. For example, who were these terrorists, what causes were they fighting for, and were they correct in accusing the village of collaborating with the enemy? Your request for more information was guite appropriate. But many of the cases we will be studying this semester require decisions in the face of uncertainty and ignorance. These are unavoidable in some situations because of factors such as the cost and time of gathering more information. Moral imagination skillfully exercised can do a lot to compensate when all of the facts are not in. (b) Second, many of you felt overly constrained by the dilemma framing of the scenario. Those of you who entered the realm of "funny business" (anything beyond the two alternatives of killing the villager or walking away) took a big step toward effective moral problem solving. By rejecting the dilemma framing of this scenario, you were trying to reframe the situation to allow for more--and more ethically viable--alternatives. Trying to negotiate with the Terrorists is a good example of reframing the scenario to admit of more ethical alternatives of action than killing or walking away.
- 4. Congratulations on completing your first ethics module! You have begun recognizing and practicing skills that will help you to tackle real life ethical problems. (Notice that we are going to work with "problems" not "dilemmas".) We will now turn, in the next module, to look at those who managed to do good in the face of difficulty. Studying moral exemplars will provide the necessary corrective to the "no-win" Mountain Terrorist Exercise.

Theory Building Activities: "Responsibility and Incident at Morales" The "Incident at Morales" dramatizes a fictional industrial accident that occurred at a chemical plant in the village of Morales. Produced by the National Institute for Engineering Ethics with a grant from the National Science Foundation, this video raises a series of important ethical problems that engineers and other professionals face when they make decisions and solve problems in the dynamic, competitive context of business. This module provides a theory-building activity where students plan and carry out an imaginary public hearing into who is responsible for the incident. It sets forth summaries of the different senses of the concept of moral responsibility, outlines the different constituencies participating in the public hearing, and provides a time line for preparing for, carrying out, and debriefing on the public hearing. Students learn about moral responsibility by using different responsibility frameworks to prepare public statements, raise questions, and reach blame assessments about the incident at morales. This module is being developed as a part of an NSF-funded project, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF SES 0551779.

Module Introduction

Getting Started...

Manuel, plant manager at the Phaust chemical plant in Morales, Mexico, has just died. While he was babysitting the process of manufacturing Phaust's new paint remover (monitoring on site temperature and pressure conditions) an explosion occurred that killed him instantly. The Mexican government has formed an independent commission to investigate this industrial accident.

This commission (headed by your instructor) has ordered key participants to testify on their role in the accident in a public hearing. Your job is to present before this commission from a stakeholder point of view. You will be divided into groups to role play the following stakeholder perspectives:

- Fred, the chief engineer involved in designing the plant,
- plant workers,

- officials from Mexican government regulatory agencies,
- Phaust management,
- representatives from the parent French company,
- officials presiding over an engineering professional society.

You will be assigned roles and given class time to prepare presentations for the commission. Then the class will enact the public hearing by having each group give a presentation from the perspective of its assigned role. Following these presentations, groups will answer questions from the investigating commission. Finally, you will work through debriefing activities to help solidify your practical understanding of the module's chief concepts. Background materials designed to help you with your presentations include sketches of moral responsibility, links to the "Incident at Morales" Case, tasks to help structure your role-playing, and activities to debrief on this exercise. This module is designed to help you learn about moral responsibility by using responsibility frameworks to make day-to-day decisions in a realistic, dynamic, business context.

Before You Come to Class...

- 1. Visit the link to the National Institute for Engineering Ethics. Look at the study guide and download the script for the video, "Incident at Morales." You want to have some idea of what happens in the video before you watch it.
- 2. Read the module. Pay special attention to the section on "What you need to know." Here you will read summaries of three senses of moral responsibility: blame responsibility, sharing responsibility, and responsibility as a virtue. Your goal here is not to understand everything you read but to have a general sense of the nature of moral responsibility, the structure of the responsibility frameworks you will be using in this module, and the difference between moral and legal responsibility. Having this background will get you ready to learn about moral responsibility by actually practicing it.
- 3. Come to class ready to watch the video and start preparing for your part in the public hearing. It is essential that you attend all four of these

classes. Missing out on a class will create a significant gap in your knowledge about and understanding of moral responsibility.

What you need to know...

"Responsibility" is used in several distinct ways that fall under two broad categories, the reactive and the proactive. Reactive uses of responsibility refer back to the past and respond to what has already occurred. (Who can be praised or blamed for what has occurred?) Proactive uses emerge through the effort to extend control over what happens in the future. An important part of extending control, knowledge, and power over the future is learning from the past, especially from past mistakes. But proactive responsibility also moves beyond prevention to bringing about the exemplary. How do occupational and professional specialists uncover and exploit opportunities to realize value in their work? Proactive responsibility (responsibility as a virtue) explores the skills, sensitivities, motives, and attitudes that come together to bring about excellence.

Different meanings of Responsibility

Reactive Senses

- 1. **Causal Responsibility** refers to prior events (called causes) which produce or prevent subsequent events (called effects). Cheap, inacurate sensors (cause) required that Manual be present on the scene (effect) to monitor the high temperatures and pressures required to correctly prepare Phaust's paint stripper.
- 2. **Role Responsibility** delineates the obligations individuals create when they commit to a social or professional role. When Fred became an engineer he committed to holding paramount the health, safety and welfare of the public. (See NSPE code of ethics)
- 3. **Capacity Responsibility** sets forth those conditions under which someone can be praised or blamed for their actions. Praise and blame associate an agent with an action. Excuses are based on means for separating or disassociating an agent from their actions. Capacity

- responsibility helps us determine whether there are any legitimate excuses available for those who would disassociate themselves from untoward, harm-causing actions.
- 4. **Blame Responsibility** determines when we can legitimately praise or blame individuals for their actions.

Proactive Senses

- 1. Sharing Responsibility extends the sphere of responsibility to include those to whom one stands in internal relations or relations of solidarity. Shared responsibility includes answering for the actions of others within one's group. It also includes coming to the moral aid of those within one's group who have gone morally astray; this involves bringing to their attention morally risky actions and standing with them when they are pressured for trying to uphold group values. While sharing responsibility entails answering for what members of one's group have done, it does not extend to taking the blame for the untoward actions of colleagues. Sharing responsibility does not commit what H.D. Lewis calls the "barbarism of collective responsibility" which consists of blaming and punishing innocent persons for the guilty actions of those with whom they are associated.
- 2. **Preventive Responsibility**: By using knowledge of the past, one can avoid errors or repeat successes in the future. Peter French calls this the "Principle of Responsive Adjustment." (One adjusts future actions in response to what one has learned from the past.) According to French, responsive adjustment is a moral imperative. If one fails to responsively adjust to avoid the repetition of past untoward results, this loops back into the past and causes a revaluation of the initial unintentional action. The benefit of the doubt is withdrawn and the individual who fails to responsively adjust is now held responsible for the original past action. This is because the failure to adjust inserts the initial action into a larger context of negligence, bad intentions, recklessness, and carelessness. Failure to responsively adjust triggers a retroactive attribution of blame.
- 3. **Responsibility as a Virtue**: Here one develops skills, acquires professional knowledge, cultivitates sensitivies and emotions, and develops habits of execution that consistently bring about value

realization and excellence. One way of getting at responsibility as an excellence it to reinterpret the conditions of imputability of blame responsibility. An agent escapes blame by restricting the scope of role responsibility, claiming ignorance, and citing lack of power and control. In responsibility as a virtue, one goes beyond blame by extending the range of role responsibilities, seeking situation-relevant knowledge, and working to skillfully extending power and control.

Blame Responsibility

To hold Fred responsible for the accident at Morales, we need to...

- 1. Specify his role responsibilities and determine whether he carried them out
- 2. Identify situation-based factors that limited his ability to execute his role responsibilities (These are factors that **compel** our actions or contribute to our **ignorance** of crucial features of the situation.)
- 3. Determine if there is any moral fault present in the situation. For example, did Fred act on the basis of **wrongful intention** (Did he intend to harm Manuel by sabotaging the plant?), fail to exercise **due care**, exhibit **negligence or recklessness**?
- 4. If Fred (a) failed to carry out any of his role responsibilities, (b) this failure contributed to the accident, and (c) Fred can offer no morally legitimate excuse to get himself off the hook, then Fred is blameworthy.

Fred, and other Incident at Morales stakeholders, can escape or minimize blame by establishing morally legitimate excuses. The following table associates common excuses with the formal conditions of imputability of blame responsibility. (Conditions of imputability are those conditions that allow us to associate an action with an agent for purposes of moral evaluation.)

Excuse Source (Capacity Responsibility)	Excuse Statement	
Conflicts within a role responsibility and between different role responsibilities	I cannot, at the same time, carry out all my conflicting role responsibilities	
Hostile Organizational Environment which routinely subordinates ethical to financial considerations.	The environment in which I work makes it impossible to act responsibly. My supervisor routinely overrules my professional judgment, and I can do nothing about it.	
Overly determining situational constraints: financial and time	I lack the time and money to carry out my responsibility.	
Overly determining situational constraints: technical and manufacturing	Carrying out my responsibility goes beyond technical or manufacturing limits.	
Overly determining situational constraints: personal, social, legal, and political.	Personal, social, legal or political obstacles prevent me from carrying out my responsibilities.	
Knowledge Limitations	Crucial facts about the situation were kept from me or could not be uncovered given even a reasonable effort.	

Excuse Table

Proactive Responsibility

Preventive Responsibility: Responsive Adjustment

- Responsibility to adjust future actions in response to what has been learned from the past
- **Scenario One**: Past actions that have led to untoward results. Failure here to adjust future actions to avoid repetition of untoward results leads to reassessing the original action and retrospectively blaming the agent.
- **Scenario Two**: Past actions have unintentionally and accidentally led to positive, value-realizing results. Here the agent responsively adjusts by being prepared to take advantage of being lucky. The agent adjusts future actions to repeat past successes. In this way, the agent captures past actions (past luck) and inserts them into the scope of praise.
- **Nota Bene**: The principle of responsible adjustment sets the foundation for responsibility in the sense of prevention of the untoward.

Responsibility as a Virtue or Excellence

- 1. Virtues are excellences of the character which are revealed by our actions, perceptions, beliefs, and attitudes. Along these lines, responsibility as a virtue requires that we reformulate responsibility from its reactive, minimalist sense (where it derives much of its content from legal responsibility) to responsibility as an excellence of character.
- 2. Aristotle situates virtues as means between extremes of excess and defect. Can you think of examples of too much responsibility? (Does Fred try to take on too much responsibility in certain situations?) Can you think of anyone who exhibits too little responsibility. (Does Fred take on too little responsibility or shift responsibility to others?) For Aristotle, we can have too much or too little of a good thing. From the "too much" we derive vices of excess. from the "too little" we derive the vices of defect.
- 3. Virtues are more than just modes of reasoning and thinking. They also consist of emotions that clue us into aspects of the situation before us that are morally salient and, therefore, worthy of our notice and

- response. Two emotions important for responsibility are care and compassion. Care clues us into aspects of our situation that could harm those who depend on our actions and vigilance. Do Wally and Fred pay sufficient attention to the early batch leakages in the Morales plant? If not, does this stem from a lack of care ("Let operations handle it") and a lack of compassion ("Manuel can take care of himself")? Care and compassion help to sensitize us to what is morally salient in the situation at hand. They also motivate us to act responsibility on the basis of this sensitivity.
- 4. Responsibility as a virtue manifests itself in a willingness to pick up where others have left off. After the Bhopal disaster, a worker was asked why, when he saw a cut-off valve open, he didn't immediately close it as safety procedures required. His response was that shutting off the value was not a part of his job but, instead, the job of those working the next shift. This restriction of responsibility to what is one's job creates responsibility gaps through which accidents and other harms rise to the surface. The worker's lack of action may not constitute moral fault but it surely signifies lack of responsibility as a virtue because it indicates a deficiency of care and compassion. Those who practice responsibility as a virtue or excellence move quickly to fill responsibility gaps left by others even if these tasks are not a part of their own role responsibilities strictly defined. Escaping blame requires narrowing the range of one's role responsibilities while practicing responsibility as a virtue often requires effectively expanding it.
- 5. Finally, responsibility as an excellence requires extending the range of knowledge and control that one exercises in a situation. Preventing accidents requires collecting knowledge about a system even after it has left the design and manufacturing stages and entered its operational life. Responsibility requires that we search out and correct conditions that could, under the right circumstances, produce harmful accidents. Moreover, responsibility is a function of power and control. Extending these and directing them toward good results are clear signs of responsibility as a virtue.

Reponsibility as Virtue

- The Incident at Morales provides us with a look into a fictionalized disaster. But, if it is examined more carefully, it also shows opportunities for the exercise of responsibility as a virtue. The following table will help you to identify these "responsibility opportunities" and allow you to imagine counbter-factuals where had individuals acted otherwise the "incident" could have been avoided and moral value could have been realized.
- Think of virtuous or even heroic interventions that could have prevented the accident. These represents, from the standpoint of the film, lost opportunities for realizing responsibility and other virtues.

Characteristic	Relevance to Incident at Morales	
Change goal from avoiding blame to pursuing professional excellence.	Could this have led participants to look for more creative responses to EPA environmental regulations?	
Develop a flexible conception of your role responsibilities and move quickly to extend it to fill responsibility gaps left by others.	Could this have structured differently the relation between those responsible for plant design/construction and those responsible for its operation?	
Extend the scope and depth of your situational knowledge, especially regarding accumulating information	Would this have led to further follow-up on the early signs of leakage of the couplings?	

on the operational history of newly implemented technologies.	
Extend control and power. This includes finding ways of more effectively communicating and advocating ethical and professional standards in the context of groupbased decision-making.	Could Fred have handled more proactively the last minute change in the chemical formulation of the paint remover?

Responsibility as a Virtue: Recovering Lost Opportunities

Section Conclusion

Integrate the retroactive and proactive senses of responsibility into your group's presentation for the public hearing. Don't just work on the reactive approach, i.e., try to avoid blame and cast it on the other stakeholder groups. Think proactively on how to prevent future problems, respond to this accident, and turn the events into positive opportunities to realize value.

Questions to Get Started

- Is Fred (blame) responsible for the accident and even Manuel's death? (Use the conditions of imputability and the excuse table to get started on this question.)
- Did Wally and Chuck evade their responsibility by delegating key problems and decisions to those, like plant manager Manuel, in charge of operations? (Start the answer to this question by determining the different role responsibilities of the stakeholders in this situation.)
- What kind of responsibility does the parent French company bear for shifting funds away from Phaust's new plant to finance further acquisitions and mergers? (Looking at the modules on corporate social responsibility and corporate governance will help you to frame this in terms of corporate responsibility.)
- Do engineering professional societies share responsibility with Fred?
 (The CIAPR and NSPE codes of ethics will help here. Try benchmarking corporate codes of ethics to see if they provide anything relevant.

• Look at the positive, proactive moral responsibilities of professional societies. What can they do to provide moral support for engineers facing problems similar to those Fred faces? Think less in terms of blame and more in terms of prevention and value realization.

Presentation on Moral Responsibility

https://cnx.org/content/m15627/

What you are going to do...

In this module, you will...

- 1. apply and integrate the concept of moral repsonsibility (blame responsibility, sharing responsibility, responsibility as a virtue) to situations that arise in the video, "Incident at Morales."
- 2. learn the basic facts, character profiles, and decision-situations portrayed in the video, "Incident at Morales." You will see the video in class and examine the script and Study Guide at the NIEE website.
- 3. work in groups to develop and play a stakeholder role in a fictional public hearing. Your group's specific tasks are outlined below in one of the group profiles provided. In general, you will prepare a statement advancing your group's interests and points of view. The responsibility frameworks will help you anticipate questions, prepare responses, and defend your role against those in other roles who may try to shift the blame your way. But most important, this module provides tools to help you go beyond the reactive, blame standpoint.
- 4. participate in a mock public hearing by playing out your group's assigned role.
- 5. work with the other groups to debrief on this activity. The public hearing will generate a lot of information, ideas, and positions. Debriefing will help you to structure and summarize this material. The objective here is to learn by doing. But to truly learn from what you have done, you need to reflect carefully.

Stakeholder Roles

Mexican Government Regulatory Agencies

- Look at OSHA regulations on safety. Do any of these apply to the incident at morales. Pay particular attendion to responsibilities for providing safe working conditions and to mandated procedures for accident prevention. How as a government agency can you encourage companies to take active and positive measures to increase workplace safety and prevent accidents?
- Look at EPA or JCA for ideas on environmental issues. What are Phaust's responsibilities regarding local environmental conditions? (Should the Mexican government require lining waste water ponds?)
- As an official representing Mexican government regulatory agencies, how do you balance the safety and environmental needs of Mexican citizens and workers with the need to attract foreign companies and investors to Mexico to promote economic development. Should safety and environmental values ever be traded off to promote economic development?

Workers at Morales Plant

- Manuel, your plant manager, has just died. You and your co-workers are concerned about the safety of this new plant. Can you think of any other issues that may be of concern here?
- Develop a statement that summarizes your interests, concerns, and rights. Are these being addressed by those at Phaust and the parent company in France?
- The Mexican Commission established to investigate this "incident" will ask you questions to help determine what cause it and who is to blame. What do you think some of these questions will be? How should you respond to them? Who do you think is to blame for the incident and what should be done in response?

Designing Engineer: Fred

• Examine Fred's actions and participation from the standpoint of the three responsibilty frameworks mentioned above.

- Develop a two minute position paper summarizing Fred's interests, concerns, and rights.
- Anticipate questions that the Commission might raise about Fred's position and develop proactive and effective responses..
- Be sure to use the three responsibility frameworks. Is Fred to blame for what happened? In what way? What can professional societies do to provide moral support to members in difficult situations? How can interested parties provide moral support? Finally, what opportunities arose in the video practicing moral responsibility as a virtue? (Think about what an exemplary engineer would have done differently.)

Phaust Management: Wally and Chuck

- Chuck and Walley made several decisions reponding to the parent company's budget cuts that placed Fred under tight constraints.
 Identify these decisions, determine whether there were viable alternatives, and decide whether to justify, excuse, or explain your decisions.
- Develop a two minute position paper that you will present to the commission.
- Anticipate Commission questions into your responsibility and develop effective responses to possible attempts by other groups to shift the blame your way.

Corporate Governance: French Parent Company

- You represent the French owners who have recently required Phaust Chemical. You have recently shifted funds from Phaust operations to finance further mergers and acquisitions for your company.
- What are your supervisory responsibilities in relation to Phaust?
- Develop a preliminary two minute presentation summarizing your position and interests.
- Anticipate likely commission questions along with possible attempts by other groups to shift the blame your way.

Engineering Professional Society

- You represent the professional engineering society to which Fred belongs.
- Develop a two minute presentation that outlines your group's interests and position.
- Anticipate possible Commission questions, develop responses, and anticipate attempts by other groups to shift the blame your way.
- Respond to whether your professional society should extend moral support to engineers in difficult positions like Fred's. Should they clarify code provisions? Provide legal support and counseling? Make available a professional/ethical support hotline?

Investigative Commission

This role will be played by your instructor and other "guests" to the classroom. Try to anticipate the commissions questions. These will be based on the conditions of blame responsibility, the principle of responsive adjustment, and responsibility as a virtue.

Module Time Line

- Module Preparation Activities: Read module and visit niee.org to get general orientation to "Incident at Morales"
- **Class One**: Watch Video. Receive group role. Begin preparing your group role.
- **Class Two:** Work within your group on preparing your group's statement, anticipating questions, and developing responses.
- Class Three: Participate in the Public Hearing. The group representing the Mexican Commission will convene the public hearing, listen to the group's statements, ask questions, and prepare a brief presentation on the Commission's findings
- **Class four**: Class will debrief on the previous class's public hearing. This will begin with the Commission's findings

Incident at Morales and Jeopardy

Jeopardy and Incident at Morales

https://cnx.org/content/m15627/

Jeopardy on Socio-Technical Systems in Incident at Morales https://cnx.org/content/m15627/

What have you learned?

Listen to the findings of the Mexican Government Commission. Write a short essay responding to the following questions. Be prepared to read parts of your essay to your professor and to your classmates.

- 1. Do you agree with the Commissions findings? Why or why not? Be sure to frame your arguments in terms of the responsibility frameworks provided above.
- 2. Were there any opportunities to offer Fred moral support by those who shared responsibility with him? What were these opportunities. How, in general, can professional societies support their members when they find themselves in ethically difficult situations?
- 3. What opportunities arise for exercising resonsibility as an excellence? Which were taken advantage of? Which were lost?
- 4. Finally, quickly list themes and issues that were left out of the public hearing that should have been included?

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- 9. W.H. Walsh (1970) "Pride, Shame and Responsibility," The Philosophical Quarterly, Vol 20, no 78, January 1970: 1-13.
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Professional Ethics in Puerto Rico: Codes, Problem Solving, and Ethical Dissent

This exercise in Business and Professional Ethics uses the DVD developed by the National Institute for Engineering Ethics, "Incident at Morales" to teach the ethical leadership and social responsibility in business and engineering. It also raises issues of how professionals must work to realize professional standards while operating within the constraints posed by the financial objectives. This derived copy has been developed to go along with the presentation given on engineering and surveying ethics before the Puerto Rico State Society of Professional Engineers and Land Surveyors on November 15, 2007. This activity was co-sponsored by the Puerto Rico Office of Governmental Ethics. As with the original Incident at Morales module, this module has been completed as a part of the NSF-funded EAC Toolkit project, SES 0551779.

I. Module Introduction

In this module, you will view the DVD Incident at Morales and carry out a series of activities designed to familiarize you with issues in ethical leadership, social responsibility, and globalization. Links to interviews with major figures on globalization, to the Connexions module "Socio Technical Systems in Decision Making" and to online material on "Incident at Morales" will help you to gather the information you need to complete this module.

Issues in Incident at Morales

The "Incident at Morales" is the dramatization of a series of decisions and actions that culminate in the actual incident. It provides an excellent opportunity to discuss a number of issues in engineering and professional ethics: conflict of interest, confidentiality, the paramountcy of public welfare (including environmental integrity), and the way in which engineering and business constraints interact to create ethical dificulties. A chemical engineer, Fred, is hired by Phaust Chemical to build a plant for manufacturing a paint stripper, one of Phaust's leading products. While Phaust officials deny that they hired Fred because his previous job was with their main competitor, Chemitoil, they nevertheless press Fred for details about the Chemitoil plant Fred just designed. When mergers and acquisitions of Phaust's parent company in France translate into sharp budget cuts on the new plant Fred is designing, he finds himself confronted with a series of ethical problems that become increasingly difficult to resolve.

Below is a list of ethical issues raised in the video. The quotes below come from the Study Guide to "Incident at Morales"

- Confidentiality: "Although the lawyers note that Fred has no legal obligations to Chemitoil because he did not sign a non-disclosure agreement, does Fred have a moral obligation to ensure the confidentiality of the information he may have learned at Chemitoil?
- Wally's "One Rule": What is the impact of Wally's "One Rule" on Fred's ability to do his job? More
 importantly, does this interfere with Fred's ability to meet his professional ethical obligations in the course of
 conducting his job?"
- **Lutz and Lutz** Controls: Wally claims that **Lutz and Lutz** controls are the best among the available alternatives. He also claims that the fact that Chuck's brother-in-law works with **Lutz and Lutz** is not a relevant factor. How should Fred choose in this situation regarding controls?
- Couplings: In choosing both the type of couplings and piping as well as to use a local (Mexico) supplier without a plant inspection, what factors should Fred take into account? What should be the margin of error in terms of pressure? How does Fred balance safety and reliability with the need to cut costs due to the parent company's recent acquisitions?
- Environmental Regulations--When in Rome...: Should Fred take advantage of less strict environmental regulations in Mexico to save money for Phaust corporation? What are the responsibilities of multi-national corporations that operate in countries like Mexico?

What You Need to Know

This section provides general background information useful for this module. It includes information on how to (1) define problems, (2) design and evaluate ethical solutions, and (3)resolve disagreements. These frameworks can be used with the Pre-Test and Gray Matters activities.

Problem Solving Stages (Based on analogy between the problem solving and design processes

- 1. **Problem Specification or Definition**: This stage consists of defining the problem you face from different standpoints or frames. Carefully defining your problem is an essential step to designing effective and ethical solutions. Defining your problem from multiple frames or vantage points, also helps you to create imaginative and ethical solutions to problems that appear unsolvable under commonplace framings.
- 2. **Solution Generation**: In this stage, you will try to resolve the problem you defined in the previous stage. In a section below, you will find a list of generic solutions to disagreements between stakeholders.
- 3. **Solution Testing**: The solutions developed in the second stage must be tested in different ways. The reversibility test encapsulates the ethical theory of deontology; exploring the issue from the standpoint of those on the receiving end of your action outlines the idea of reciprocity which is fundamental to deontology. The harm/benefits test has you weigh benefits against harms and steers you toward that solution that produces the most benefits and the least harms. This provides a reasonable approximation to the theory of Utilitarianism which enjoins us to produce the greatest good for the greatest number. Finally, the publicity test has you attribute the values embedded in the act to the character of the agent. In this way, the publicity test encapsulates virtue ethics.
- 4. **Solution Implementation**: The chosen solution must be examined in terms of how well it responds to various situational constraints that could impede its implementation. To carry out this stage, imagine a check list of resource, interest, and technical constraints that could give rise to obstacles. Go through the list to see if any of these constraints applies to your solution.

Problems can be defined in different ways. By looking at a problem through different definitional frames, we are able to uncover non-obvious, creative solutions. Technical problems require that we focus on the hardware and software components of the underlying Socio-Technical System.

- 1. **Technical Puzzle**: If the problem is framed as a technical puzzle, then solutions would revolve around developing designs that optimize both ethical and technical specifications, that is, resolve the technical issues and realize ethical value. For example, Phaust chemists could solve the problems of the leaky batches in the new plant by coming up with a new chemical formulation of the paint stripper that doesn't require high temperature and pressure.
- 2. Social Problem: If the problem is framed as a social problem, then solutions would revolve around changing laws or bringing about systemic reform through political action. This would lead one to focus on the people/groups/roles component (working to social practices) or the legal component of a socio-technical system. Fred's dilemma on whether to line the holding ponds at the Morales plant could be resolved if international environmental standards were raised to EPA levels.
- 3. **Stakeholder Conflict**: If the problem is framed as a conflict between different stakeholder interests, then the solution would concentrate on getting stakeholders (both individuals and groups) to agree on integrative or compromise-building solutions. This requires concentrating on the people/group/role component of the STS. (Note: A stakeholder is any group or individual with a vital interest at play in the situation.) Fred is hard pressed to satisfy Wally's One Rule, the French company's mandated budget cuts, concerns about environmental contamination (expressed by his wife, an EPA litigator), and the Mexican government's concern about worker and plant safety.
- 4. **Management Problem**: Finally, if the problem is framed as a management problem, then the solution would revolve around changing an organization's procedures. Along these lines, it would address the organization's (1) fundamental goals, (2) decision recognition procedures, (3) organizational roles, and/or (4) decision-making hierarchy. These four components comprise the organization's **CID** (corporate internal decision) structure. Fred would not have to deal with the moral concerns about passing off problems to the operations division of Phaust if there were company regulations against this or if Phaust did not present an organizational system that pits plant designers against operations.

Ethics Tests

- 1. **Reversibility**: Would this solution alternative be acceptable to those who stand to be most affected by it? To answer this question, change places with those who are targeted by the action and ask, from this new perspective, whether the action is still acceptable?
- 2. **Harm/Benefits**: What are the harms your solution is likely to produce? What are its benefits? Does this solution produce the least harms and the most benefits when compared to the available alternatives?

3. **Publicity**: Would you want to be publicly associated or identified with this action? In other words, assume that you will be judged as a person by others in terms of the moral values expressed in the action under consideration. Does this accord with how you would aspire to be judged?

One of the most difficult stages in problem solving is to jump start the process of brainstorming solutions. If you are stuck then here are some generic options guaranteed to get you "unstuck."

- 1. **Gather Information**: Many disagreements can be resolved by gathering more information. Because this is the easiest and least painful way of reaching consensus, it is almost always best to start here. Gathering information may not be possible because of different constraints: there may not be enough time, the facts may be too expensive to gather, or the information required goes beyond scientific or technical knowledge. Sometimes gathering more information does not solve the problem but allows for a new, more fruitful formulation of the problem. Harris, Pritchard, and Rabins in Engineering Ethics: Concepts and Cases show how solving a factual disagreement allows a more profound conceptual disagreement to emerge.
- 2. **Nolo Contendere**. Nolo Contendere is latin for not opposing or contending. Your interests may conflict with your supervisor but he or she may be too powerful to reason with or oppose. So your only choice here is to give in to his or her interests. The problem with nolo contendere is that non-opposition is often taken as agreement. You may need to document (e.g., through memos) that your choosing not to oppose does not indicate agreement.
- 3. **Negotiate**. Good communication and diplomatic skills may make it possible to negotiate a solution that respects the different interests. Value integrative solutions are designed to integrate conflicting values. Compromises allow for partial realization of the conflicting interests. (See the module, The Ethics of Team Work, for compromise strategies such as logrolling or bridging.) Sometimes it may be necessary to set aside one's interests for the present with the understanding that these will be taken care of at a later time. This requires trust.
- 4. **Oppose**. If nolo contendere and negotiation are not possible, then opposition may be necessary. Opposition requires marshalling evidence to document one's position persuasively and impartially. It makes use of strategies such as leading an "organizational charge" or "blowing the whistle." For more on whistle-blowing consult the discussion of whistle blowing in the Hughes case that can be found at computing cases.
- 5. **Exit.** Opposition may not be possible if one lacks organizational power or documented evidence. Nolo contendere will not suffice if non-opposition implicates one in wrongdoing. Negotiation will not succeed without a necessary basis of trust or a serious value integrative solution. As a last resort, one may have to exit from the situation by asking for reassignment or resigning.

Prepare a socio-technical analysis of Morales, Mexico. Your analysis will examine the insertion of the Phaust chemical plant into the Morales context. Can you identify any potential value conflicts in the Incident at Morales STS? Look at values like safety, equity/justice, intellectual property, confidentiality, responsibility, reasonableness. Compare moral values, moral and nonmoral values, and even nonmoral with nonmoral values to spot potential conflicts.

General Information on Socio-Technical Systems

- 1. Socio-Technical Systems are systems, that is, complex structures in which simpler components are related and interact. Common STS components are hardware, software, physical surroundings, stakeholders (people, groups, roles), procedures, laws, and information systems.
- 2. STSs embody values. These values, often moral, can come into conflict with one another. This is an important source of ethical and social problems.
- 3. STSs change; the path of this change is their trajectory. Value mismatches between the values embedded in the STS provide internal sources of change. Broader external forces such as political and economic power structures can produce change in STSs from without. What is important in professional ethics is learning how to direct this change toward ethical ends.

Preparing a STS Table

- Study the two templates in the module, "Socio Technical Systems in Professional Decision Making." See which one applies best to the Incident at Morales case.
- Redo the headings of the table substituting relevant items for those in the templates that are not relevant. For example, in preparing a STS table for a computer system, you may wish to change rate and rate structures into

- something like data and data structures.
- Fill in the relevant columns in your newly revised table. For example, in the Incident at Morales, the description of the physical surroundings would be based on the brief video segment where Fred is consulting with Wally and Manuel. What is the geographical area like? (It looks like a dry climate given the DVD.) What is the plant like? (It is, at the very least, small.) Attention to detail--even trivial detail--is important for these columns of the STS.
- For the second table, take the short value list and (1) look for new value mismatches, (2) identify existing value conflicts, and (3) describe any harmful long term consequences. In Incident at Morales, you may want to concentrate on justice (equity), responsibility for safety, respect, property, and free speech.
- Keep your tables simple and direct. Remember, this is a device to help you visualize value conflicts hidden in technologies and socio technical systems.

Hardware	Software	Physical Surroundings	People, Groups, Roles	Procedures	Laws, Statutes, Regulations	Data and Data Structures

Socio-Technical System

	Hardware/Software	Physical Surroundings	People, Groups, Roles	Procedures	Laws, Statutes, Regulations	Da Da Sti
Justice (Equity and Access)	Responsibility					
Responsibility						
Respect (Privacy and Due Process)						
Property						
Free Speech						

STS and Values

III. What you are going to do

You will be assigned one of the topics described above. Discuss this topic with your group. Answer the questions. The prepare a brief summary of your answers to share with the rest of the class. The topics, again, are confidentiality, Wally's "One Rule", Lutz and Lutz Controls, the quality and integrity of the couplings, and the

difference in environmental regulations. Throughout your reflections look for opportunities open to Fred to demonstrate ethical leadership. What obstacles stand in his way? What can he do to overcome them?

Scenario 1: "Tell me this is like what you built!"

- **WALLY**: Chuick is going to have a project kick-off meeting this afternoon. Your plant design will be on the agenda. It'll be at three. We don't waste time around here. We're fast at Phaust. corporate tag line.
- (Walley hands the preliminary plant plans to Fred.)
- **WALLEY**: You might want to look at this. (Hopeful) Tell me if this is like what you were building at your last job.
- You are Fred. Respond to Wally's question. Try to balance respect to your former employer, Chemitoil, with your current employer, Phaust. Use the ethics tests and the feasibility test to evaluate and justify your solution.

Scenario 2: Lutz and Lutz Controls?

- You are Fred. After you point out to Wally that Lutz and Lutz controls are expensive, he advises you to "pick your fights when you can win them." (Chuck's brother-in-law is the customer representative for Lutz and Lutz.)
- You think about taking Wally's advice. The cheaper controls should work well except for situations of high temperature and pressure. This is not a problem with the formulation first put forth by Phaust chemists.
- Evaluate the following option using the ethics and feasibility tests. Can you think of a better option? Use the ethics and feasibility tests to show that your solution is better.
- Take Wally's advice and recommend purchasing the more expensive Lutz and Lutz controls. Find some other budget item for cutting expenses.

Scenario 3: Why do you think we are building it in Mexico?

Fred tells Chuck about his environmental concerns. He feels that toxic wastes will leach

into the groundwater unless the holding ponds in Morales are lined.

Evaluate the following options using the ethics and feasibility tests:

- 1. Let Chuck go ahead and call a meeting and bring in the environmental expert.
- 2. Consult Wally first before allowing Chuck to call the meeting.
- 3. Keep your environmental concerns to yourself and discuss them later with Wally

Scenario 4: Responding to the Chemical Reformulation

- After viewing the new paint stripper from chemitoil, Phaust decides to redo their own formula. they will use a higher temperature/pressure process. This cuts deeply into the margin of safety on the couplings, flanges, and cheaper controls.
- You are Fred. What should you recommend? Evaluate the following using the ethics and feasibility tests:
- 1. Go along with the new chemical formulation. The safety margins are close but still adequate. You can also pass off problems and costs to operations.
- 2. Argue that using the new formulation requires retrofitting the couplings, flanges, and controls. It is expensive in the short run but cheaper in the long run.

Scenario 5: Leaks After Thirty Batches

You notice that significant leaks are occurring during the plant's testing and start-up $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

phases. These leaks are probably caused by the cheaper controls, inferior

couplings, and

the inexperience of the plant operating team including Manuel. What should you do?

- 1. Have Manuel baby sit the batches timing them and constantly checking their temperature.
- 2. Argue that it is necessary to immediately retrofit the plant with Lutz and Lutz controls.
- 3. Argue that it is necessary to retrofit the plant with Lutz and Lutz controls but this

should be done after the plant has been turned over to operations. Let them pay for it.

Compare and rank these solution alternatives using the ethics and feasibility tests.

Scenario 6: Should you let those plant jockeys make New Stripper?

Wally: Well, this is what we're going to give to operations when we hand over the plant. Is everybody okay it?

CHUCK: Fred's the guy who's got to put his name on it, Fred's got to be alright with it...

Fred: Well, the couplings still leak when the pressure is up.

Wally: And we've alerted operations and given them specific instructions on how to maintain the connections.

CHUCK: We've got Jen working on a lower temperature formula. That may make all of this moot.

Fred: We haven't worked out the bugs on the last step of the automation... WaLLY: And next year, we'll retrofit the entire plant with L and L controls.

CHUCK: This is how it works. We design it. We build it, we hand it over.

They run it.

We've done the best we can. No plant, no process, no system is ever completely perfect.

WALLY: You built a plant that's efficient. You've got your upgrades to the wastewater

treatment.

Fred: Yeah, you're right. Um, for now Manuel or one of his guys can use the manual

release valve.

CHUCK: Okay. Time to let those plant jockeys make New Stripper.

You are Fred. Should you sign off on the documents? Use the ethics and feasibility tests to test this solution

The following table is designed to help you brainstorm and refine solutions to the problem(s) raised by your scenario.

Decision Alternative	Description	Justification: problem fit, ethics, feasibility
Solution 1		
Solution 2		

Refined Solution Table

The following table, a Solution Evaluation Matrix, will help you to evaluate and rank solutions in terms of their ethics and feasibility.

Solution / Test	Reversibility	Harm / Benefits	Publicity	Feasibility (Global)
Solution 1				
Solution 2				

Solution Evaluation Matrix

For Feasibility Table, see m14789.

Conclusion: What did you learn?

Some Closing Exercises

- 1. How does the STS in Morales, Mexico differ from that of Puerto Rico. (A suggested PR STS can be found on the last slide of the presentation appended just below.
- 2. In what ways (if any) should the CIAPR code of ethics be changed to respond to the problems that arise in "Incident at Morales"? Is it necessary to add more specific principles of professional conduct? Should more aspirational, value-based provisions be added.
- 3. Obviously, it is best to direct changes in our STSs to avoid problems like those arising in "Incident at Morales." What kind of changes should we make in the stakeholder columns? Can professional societies like the CIAPR play a role in preventing these problems? Is this primarily a compliance role or can other roles be identified?

CIAPR/OEG/CEP Presentation in Professional Ethics

The following resources were invaluable in preparing this module

- Elena Lugo, Etica Profesional Para La Ingeniera, Mayaguez, PR: Liberia Universal, Inc., 1985. The first book on engineering ethics written in Spanish, it deserves the excellent review it received in Business and Professional Ethics in 1995.
- 2. Wilfredo Munoz-Roman, **Etica en la Practica Profesional de la Ingenieria: Aspectos Filosoficos, Historicos y Procesales,** San Juan, PR: Universidad Politecnica de Puerto Rico, 1998. This book sponsored by the CIAPR forms the basis of the slides outlining the institutionalization of engineering in Puerto Rico by the Colegio de Intenieros de Puerto Rico.
- 3. Carl Mitcham and Marcos Garcia de la Huerta, **La Etica En La Profesion De Ingeniero**, Universidad de Chile: Departamento de Estudios Humanisticos, Facultad de Ciencias Fisicas y Matematicas, 2001.
- 4. Stephen H. Unger, **Controlling Technology: Ethics and the Responsible Engineer, 2nd Edition**, New York: John Wiley and Sons, INC., 1994, 220-239. Unger discusses the positive role professional societies can

- play in supporting ethical engineers. Chapter 7 (220-239) provides helpful hints to those who would ethically dissent. This advice can also be found at onlineethics.org.
- 5. Charles Harris, Michael Pritchard, and Michael Rabins, **Engineering Ethics: Concepts and Cases, 3rd Edition**, US: Thompson, 2005. An excellent and widely used textbook in engineering. It's cases have been developed and refined through several NSF-funded case developing initiatives.
- 6. Michael Davis, **Thinking Like an Engineer: Studies in the Ethics of a Profession**, UK: Oxford University Press, 1998. In addition to providing an excellent historical background to engineering ethics, this book contains invaluable discussions of codes of ethics, wrongdoing in engineering, and a summary of a study looking at the organizational contexts in which engineerins practice.
- 7. Jimmy Smith and Patricia Harper, editors, **Engineering Ethics: Concepts, Viewpoints, Cases and Codes**, Texas Tech University and Murdough Center for engineering Professionalism: National Institute for Engineering Ethics, 2004. This excellent resource, written by and for engineers, contains the NSPE BER decisions on key cases.
- 8. Samuel C. Florman, **The Existential Pleasures of Engineering**, New York: St Martin's Press, 1976. Florman defends engineering against the "antitechnologists." But he also writes from the experience of a practicing engineer on joys brought about by the pursuit of excellence in engineering. Florman is engineering's most eloquent spokesperson.

For invaluable information on codes of ethics, their functions, and the results they bring about, consult the following:

- 1. Kenneth Kipnis, "Engineers Who Kill: Professional Ethics and the Paramountcy of Public Safety," in **Business and Professional Ethics**, 1(1), Fall 1981: 77-91.
- 2. John Kultgen, "The Ideological Use of Professiuonal Codes," in **Business and Professional Ethics**>, 1(3): 53-69. Kultgen reveals a disparity between the meanings professional codes convey to membership versus those conveyed to outsiders. He identifies four myths that codes can fall into: independence, altruism, peer review, and wisdom. Must reading for those who would identify pitfalls of professionalism and professional codes.
- 3. Lynn Sharp Paine, "Managing for Organizational Integrity" in **Harvard Business Review**, March-April 1994: 106-117. This seminal article contrasts integrity-based and compliance strategies for implementing ethical management. The focus is business ethics but her argument is highly relevant for engineers and surveyors working in organizational contexts.
- 4. Gary Weaver and Linda Klebe Trevino, "Compliance and Values Oriented Ethics Programs: Influences on Employees' Attitudes and Behavior," in **Business Ethics Quarterly**, 9(2): 315-335.
- 5. John Ladd, "The Quest for a Code of Professional Ethics: An Intellectual and Moral Confusion," in **Ethical Issues in Engineering**, edited by Deborah G. Johnson, Englewood Cliffs, NJ: Prentice Hall, 1991: 130-136.
- This presentation was given before the CIAPR, OEG, and the UPRM CEP organizations on November 15, 2007.

CIAPR Presentation on Professional Ethics

https://cnx.org/content/m15501/

This presentation on Professional Ethics has been developed for the Puerto State Society of Professional Engineers and Surveyors. The PR Office of Governmental Ethics and the University of Puerto Rico, Mayaguez Campus Center for Professional Enhancement allowed participants credit for the November 15, 2007 activity.

Evaluations for Mayaguez Workshop https://cnx.org/content/m15501/

This media file has been added for those referred here by the Frontiers in Education Work in Progress that details this activity. Clicking on the link provided will open workshop assessment results generated November 15, 2007 by the Puerto Rican Office of Government Ethics. Although these results are in Spanish, they can give English readers a rough idea of how participants viewed the content, pedagogical style, and presenters. More complete assessment will follow upon future instantiations of this workshop.

Frontiers in Education Presentation 2008 Teaching Engineering Ethics in Puerto Rico https://cnx.org/content/m15501/

Clicking on this media file will open the presentation delivered by William Frey and Efrain O'Neill at Frontiers in Education, October 24, 2008. This presentation summarizes a workshop developed for engineering practitioners in Puerto Rico in engineering ethics.

Intermediate Moral Concepts https://cnx.org/content/m15501/

This figure provides a table summary of intermediate moral concepts used in decision making in the business and professional areas.

Basic Moral Concepts https://cnx.org/content/m15501/

This figure offers a table summary of basic moral concepts used in decision making in the business and professional areas.

Partial Exam Rubric https://cnx.org/content/m15501/

Jeopardy on Incident at Morales https://cnx.org/content/m15501/

This module is a WORK-IN-PROGRESS; the author(s) may update the content as needed. Others are welcome to use this module or create a new derived module. You can COLLABORATE to improve this module by providing suggestions and/or feedback on your experiences with this module. This module links to an assessment module that contains exercises useful for its improvement. The authors ask those who use it to carry out assessment activities and communicate the results to them in order to help in this modules continual improvement.

Funded by the National Science Foundation: "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF-SES-0551779

Three Frameworks for Ethical Problem-Solving in Business and the Professions
This module provides three frameworks that are essential to problem-solving in professional and occupational contexts. The first framework structures problem-solving by identifying four stages: **problem specification**, **solution generation**, **solution testing**, and **solution implementation**. The second framework zeros in on the solution testing phase and offers three means of testing and ranking solution alternatives in terms of their ethics. It consists of reversibility, harm, and publicity tests. The third framework consists of a feasibility test designed to identify obstacles to implementing solutions that arise from situational constraints like resource, interest, and technical limitations. These frameworks are abbreviated from materials that will eventually be published in Good Computing: A Virtue Approach to Computer Ethics that is being authored by Chuck Huff, William Frey, and Jose Cruz-Cruz. They can also be supplemented by consulting www.computingcases.org and Engineering Ethics: Concepts and Cases by Rabins, Harris, and Pritchard. This module has been developed as a part of an NSF-funded project, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF SES 0551779.

Module Introduction

In this module you will learn and practice three frameworks designed to integrate ethics into decision making in the areas of practical and occupational ethics. The first framework divides the decision making process into four stages: problem specification, solution generation, solution testing, and solution implementation. It is based on an analogy between ethics and design problems that is detailed in a table presented below. The second framework focuses on the process of testing solution alternatives for their ethics by deploying three ethics tests that will help you to evaluate and rank alternative courses of action. The reversibility, harm, and publicity tests each "encapsulate" or summarize an important ethical theory. Finally, a feasibility test will help you to uncover interest, resource, and technical constraints that will affect and possibly impede the realization of your solution or decision. Taken together, these three frameworks will help steer you toward designing and implementing ethical solutions to problems in the professional and occupational areas.

Two online resources provide more extensive background information. The first, www.computingcases.org, provides background information on the ethics tests, socio-technical analysis, and intermediate moral concepts. The second, http://onlineethics.org/essays/education/teaching.html, explores in more detail the analogy between ethics and design problems. Much of this information will be published in Good Computing: A Virtue Approach to Computer Ethics, a textbook of cases and decision making techniques in computer ethics that is being authored by Chuck Huff, William Frey, and Jose A. Cruz-Cruz.

Problem-Solving or Decision-Making Framework: Analogy between ethics and design

Traditionally, problem-solving frameworks in professional and occupational ethics have been taken from rational decision procedures used in economics. While these are useful, they lead one to think that ethical decisions are already "out there" waiting to be discovered. In contrast, taking a design approach to ethical decision making emphasizes that ethical decisions must be created, not discovered. This, in turn, emphasizes the importance of moral imagination and moral creativity. Carolyn Whitbeck in Ethics in Engineering Practice and Research describes this aspect of ethical decision making through the analogy she draws between ethics and design problems in chapter one. Here she rejects the idea that ethical problems are **multiple choice problems**. We solve ethical problems not by choosing between ready made solutions given with the situation; rather we use our moral creativity and moral imagination to design these solutions. Chuck Huff builds on this by modifying the design method used in software engineering so that it can help structure the process of framing ethical situations and creating actions to bring these situations to a successful and ethical conclusion. The key points in the analogy between ethical and design problems are summarized in the table presented just below.

Analogy between design and ethics problem-solving				
Design Problem Ethical Problem				
Construct a prototype that optimizes (or satisfices) designated specifications	Construct a solution that integrates and realizes ethical values (justice, responsibility, reasonableness, respect, and safety)			
Resolve conflicts between different specifications by means of integration	Resolve conflicts between values (moral vs. moral or moral vs. non-moral) by integration			
Test prototype over the different specifications	Test solution over different ethical considerations encapsulated in ethics tests			
Implement tested design over background constraints	Implement ethically tested solution over resource, interest, and technical constraints			

Software Development Cycle: Four Stages

(1) problem specification, (2) solution generation, (3) solution testing, and (4) solution implementation.

Problem specification

Problem specification involves exercising moral imagination to specify the socio-technical system (including the stakeholders) that will influence and will be influenced by the decision we are about to make. Stating the problem clearly and concisely is essential to design problems; getting the problem right helps structure and channel the process of designing and implementing the solution. There is no algorithm available to crank out effective problem specification. Instead, we offer a series of guidelines or rules of thumb to get you started in a process that is accomplished by the skillful exercise of moral imagination.

For a broader problem framing model see Harris, Pritchard, and Rabins, **Engineering Ethics: Concepts and Cases**, 2nd Edition, Belmont, CA: Wadsworth, 2000, pp. 30-56. See also Cynthia Brincat and Victoria Wike, **Morality and Professional Life: Values at Work**, New Jersey: Prentice Hall, 1999.

Different Ways of Specifying the Problem

- Many problems can be specified as disagreements. For example, you disagree with your supervisor over the safety of the manufacturing environment. Disagreements over facts can be resolved by gathering more information. Disagreements over concepts (you and your supervisor have different ideas of what safety means) require working toward a common definition.
- Other problems involve conflicting values. You advocate installing pollution control technology because you value environmental quality and safety. Your supervisor resists this course of action because she values maintaining a solid profit margin. This is a conflict between a moral value (safety and environmental quality) and a nonmoral value (solid profits). Moral values can also conflict with one another in a given situation. Using John Doe lawsuits to force Internet Service Providers to reveal the real identities of defamers certainly protects the privacy and reputations of potential targets of defamation. But it also places restrictions on legitimate free speech by making it possible for powerful wrongdoers to intimidate those who would publicize their wrongdoing. Here the moral values of privacy and free speech are in conflict. Value conflicts can be addressed by harmonizing the conflicting values, compromising on conflicting values by partially realizing them, or setting one value aside while realizing the other (=value trade offs).

- If you specify your problem as a disagreement, you need to describe the facts or concepts about which there is disagreement.
- If you specify your problem as a conflict, you need to describe the values that conflict in the situation.
- One useful way of specifying a problem is to carry out a stakeholder analysis. A stakeholder is any group or individual that has a vital interest at risk in the situation. Stakeholder interests frequently come into conflict and solving these conflicts requires developing strategies to reconcile and realize the conflicting stakes.
- Another way of identifying and specifying problems is to carry out a socio-technical analysis. Sociotechnical systems (STS) embody values. Problems can be anticipated and prevented by specifying possible value conflicts. Integrating a new technology, procedure, or policy into a socio-technical system can create three kinds of problem. (1) Conflict between values in the technology and those in the STS. For example, when an attempt is made to integrate an information system into the STS of a small business, the values present in an information system can conflict with those in the socio-technical system. (Workers may feel that the new information system invades their privacy.) (2) Amplification of existing value conflicts in the STS. The introduction of a new technology may magnify an existing value conflict. Digitalizing textbooks may undermine copyrights because digital media is easy to copy and disseminate on the Internet. (3) Harmful consequences. Introducing something new into a socio-technical system may set in motion a chain of events that will eventually harm stakeholders in the socio-technical system. For example, giving laptop computers to public school students may produce long term environmental harm when careless disposal of spent laptops releases toxic materials into the environment.
- The following table helps summarize some of these problem categories and then outlines generic solutions.

Problem Type	Sub-Type		Solution Outline		
Disagreement	Factual Conceptual	gatherin informa	t in dispute chod for g on its		
Conflict			Value Integrative	Partially Value Integrative	Trade Off

	Moral vs. Moral Non-moral vs. moral Non-moral vs. non-moral			
Moral Ecologies	Finance-Driven Ecologies Customer-Driven Ecologies Quality-Driven Ecologies	Strategy for dissenting from a staff position where one is outside decision-making	Practicing ethical advocacy when "going to the mat" on ethical perspectives in group decision- making	Ability to draw attention to ethical values that form center of organization identity
Likely Concepts in Conceptual Disagreement	Public Intellectual Property, Faithful Agency, Professional Integrity, Loyalty, Public Safety and Health, Due Process, Responsible Dissent	Working from Legal Definitions	Bridging: moving from cases to concepts	Discussion: Playing on shared values and trust to reach consensus through dialogue

The materials on moral ecologies come from Huff, C., Barnard, L., and Frey, W. (2008). "Good computing: a pedagogically focused model of virtue in the practice of computing (parts 1 and 2)", Journal of Information, Communication and Ethics in Society, Volume 6, Issues 3 and 4: 246-316. See also, Michael Davis, Thinking Like An Engineer, Oxford, 1998, 119-156.

Instructions for Using Problem Classification Table

- 1. Is your problem a conflict? Moral versus moral value? Moral versus non-moral values? Non-moral versus non-moral values? Identify the conflicting values as concisely as possible. Example: In Toysmart, the financial values of creditors come into conflict with the privacy of individuals in the data base: financial versus privacy values.
- 2. Is your problem a disagreement? Is the disagreement over basic facts? Are these facts observable? Is it a disagreement over a basic concept? What is the concept? Is it a factual disagreement that, upon further reflection, changes into a conceptual disagreement?
- 3. Does your problem arise from an impending harm? What is the harm? What is its magnitude? What is the probability that it will occur?
- 4. If your problem is a value conflict then can these values be fully integrated in a value integrating solution? Or must they be partially realized in a compromise or traded off against one another?
- 5. If your problem is a factual disagreement, what is the procedure for gathering the required information, if this is feasible?

6. If your problem is a conceptual disagreement, how can this be overcome? By consulting a government policy or regulation? (OSHA on safety for example.) By consulting a theoretical account of the value in question? (Reading a philosophical analysis of privacy.) By collecting past cases that involve the same concept and drawing analogies and comparisons to the present case?

Moral Ecologies

- "Moral Ecology" refers to the organization in which one works. Calling this organization an "ecology" conveys the idea that it is a system of interrelated parts. These "ecologies" differ depending on the content of the organization's central, identity-conferring values.
- In finance-driven companies, financial values form the core of the organization's identity. Ethical advocacy requires skills in bringing ethical issues to the attention of decision-makers and getting them to take these issues seriously. It helps to state ethical concerns in multi-disciplinary language. (For example, show that ignoring ethical concerns will cost the company money in the long run.)
- Customer-driven ecologies place customer values like usability, affordability, and efficiency, in the forefront of group deliberation and decision-making. Often, one must play the role of "ethics advocate" in deliberation and decision-making. One is expected to argue forcefully and persistently ("go to the mat") to make sure that ethical considerations are integrated into group deliberations and decision-making.
- Quality-driven companies place ethical values into the core of group deliberations and decision-making.
 Here one is not so much ethics advocate as ethics enabler. This new role requires that one help one's
 group find creative ways of integrating ethical values with other concerns like customer and financial
 values.

If you are having problems specifying your problem

- Try identifying the stakeholders. Stakeholders are any group or individual with a vital interest at stake in the situation at hand.
- Project yourself imaginatively into the perspectives of each stakeholders. How does the situation look from their standpoint? What are their interests? How do they feel about their interests?
- Compare the results of these different imaginative projections. Do any stakeholder interests conflict? Do the stakeholders themselves stand in conflict?
- If the answer to one or both of these questions is "yes" then this is your problem statement. How does one reconcile conflicting stakeholders or conflicting stakeholder interests in this situation?

Framing Your Problem

- We miss solutions to problems because we choose to frame them in only one way.
- For example, the Mountain Terrorist Dilemma is usually framed in only one way: as a dilemma, that is, a forced decision between two equally undesirable alternatives. (Gilbane Gold is also framed as a dilemma: blow the whistle on Z-Corp or go along with the excess polution.)
- Framing a problem differently opens up new horizons of solution. Your requirement from this point on in the semester is to frame every problem you are assigned in at least two different ways.
- For examples of how to frame problems using socio-technical system analysis see module m14025.
- These different frames are summarized in the next box below.

Different Frames for Problems

- **Technical Frame**: Engineers frame problems technically, that is, they specify a problem as raising a technical issue and requiring a technical design for its resolution. For example, in the Hughes case, a technical frame would raise the problem of how to streamline the manufacturing and testing processes of the chips.
- **Physical Frame**: In the Laminating Press case, the physical frame would raise the problem of how the layout of the room could be changed to reduce the white powder. Would better ventilation eliminate or mitigate the white powder problem?

- **Social Frame**: In the "When in Aguadilla" case, the Japanese engineer is uncomfortable working with the Puerto Rican woman engineer because of social and cultural beliefs concerning women still widely held by men in Japan. Framing this as a social problem would involve asking whether there would be ways of getting the Japanese engineer to see things from the Puerto Rican point of view.
- **Financial or Market-Based Frames**: The DOE, in the Risk Assessment case below, accuses the laboratory and its engineers of trying to extend the contract to make more money. The supervisor of the head of the risk assessment team pressures the team leader to complete the risk assessment as quickly as possible so as not to lose the contract. These two framings highlight financial issues.
- **Managerial Frame**: As the leader of the Puerto Rican team in the "When in Aguadilla" case, you need to exercise leadership in your team. The refusal of the Japanese engineer to work with a member of your team creates a management problem. What would a good leader, a good manager, do in this situation? What does it mean to call this a management problem? What management strategies would help solve it?
- **Legal Frame**: OSHA may have clear regulations concerning the white powder produced by laminating presses. How can you find out about these regulations? What would be involved in complying with them? If they cost money, how would you get this money? These are questions that arise when you frame the Laminating Press case as a legal problem.
- Environmental Framing: Finally, viewing your problem from an environmental frame leads you to consider the impact of your decision on the environment. Does it harm the environment? Can this harm be avoided? Can it be mitigated? Can it be offset? (Could you replant elsewhere the trees you cut down to build your new plant?) Could you develop a short term environmental solution to "buy time" for designing and implementing a longer term solution? Framing your problem as an environmental problem requires that you ask whether this solution harms the environment and whether this harming can be avoided or remedied in some other way.

Solution Generation

In solution generation, agents exercise moral creativity by brainstorming to come up with solution options designed to resolve the disagreements and value conflicts identified in the problem specification stage. Brainstorming is crucial to generating nonobvious solutions to difficult, intractable problems. This process must take place within a non-polarized environment where the members of the group respect and trust one another. (See the module on the Ethics of Group Work for more information on how groups can be successful and pitfalls that commonly trip up groups.) Groups effectively initiate the brainstorming process by suspending criticism and analysis. After the process is completed (say, by meeting a quota), then participants can refine the solutions generated by combining them, eliminating those that don't fit the problem, and ranking them in terms of their ethics and feasibility. If a problem can't be solved, perhaps it can be dissolved through reformulation. If an entire problem can't be solve, perhaps the problem can be broken down into parts some of which can be readily solved.

Having trouble generating solutions?

- One of the most difficult stages in problem solving is to jump start the process of brainstorming solutions. If you are stuck then here are some generic options guaranteed to get you "unstuck."
- **Gather Information**: Many disagreements can be resolved by gathering more information. Because this is the easiest and least painful way of reaching consensus, it is almost always best to start here. Gathering information may not be possible because of different constraints: there may not be enough time, the facts may be too expensive to gather, or the information required goes beyond scientific or technical knowledge. Sometimes gathering more information does not solve the problem but allows for a new, more fruitful formulation of the problem. Harris, Pritchard, and Rabins in Engineering Ethics: Concepts and Cases show how solving a factual disagreement allows a more profound conceptual disagreement to emerge.
- **Nolo Contendere**. Nolo Contendere is latin for not opposing or contending. Your interests may conflict with your supervisor but he or she may be too powerful to reason with or oppose. So your only choice here is to give in to his or her interests. The problem with nolo contendere is that non-opposition is often

- taken as agreement. You may need to document (e.g., through memos) that your choosing not to oppose does not indicate agreement.
- **Negotiate**. Good communication and diplomatic skills may make it possible to negotiate a solution that respects the different interests. Value integrative solutions are designed to integrate conflicting values. Compromises allow for partial realization of the conflicting interests. (See the module, The Ethics of Team Work, for compromise strategies such as logrolling or bridging.) Sometimes it may be necessary to set aside one's interests for the present with the understanding that these will be taken care of at a later time. This requires trust.
- **Oppose**. If nolo contendere and negotiation are not possible, then opposition may be necessary. Opposition requires marshalling evidence to document one's position persuasively and impartially. It makes use of strategies such as leading an "organizational charge" or "blowing the whistle." For more on whistle-blowing consult the discussion of whistle blowing in the Hughes case that can be found at computing cases.
- Exit. Opposition may not be possible if one lacks organizational power or documented evidence. Nolo contendere will not suffice if non-opposition implicates one in wrongdoing. Negotiation will not succeed without a necessary basis of trust or a serious value integrative solution. As a last resort, one may have to exit from the situation by asking for reassignment or resigning.

Refining solutions

- Are any solutions blatantly unethical or unrealizable?
- Do any solutions overlap? Can these be integrated into broader solutions?
- Can solutions be brought together as courses of action that can be pursued simultaneously?
- Go back to the problem specification? Can any solutions be eliminated because they do not address the problem? (Or can the problem be revised to better fit what, intuitively, is a good solution.)
- Can solutions be brought together as successive courses of action? For example, one solution represents Plan A; if it does not work then another solution, Plan B, can be pursued. (You negotiate the problem with your supervisor. If she fails to agree, then you oppose your supervisor on the grounds that her position is wrong. If this fails, you conform or exit.)
- The goal here is to reduce the solution list to something manageable, say, a best, a second best, and a third best. Try adding a bad solution to heighten strategic points of comparison. The list should be short so that the remaining solutions can be intensively examined as to their ethics and feasibility.

Solution Testing: The solutions developed in the second stage must be tested in various ways.

- 1. **Reversibility**: Would I still think the choice of this option good if I were one of those adversely affected by it? (Davis uses this formulation in various publications.) I identify different stakeholders and then take up their roles. Through this imaginative projection, I should consider how the action under consideration will affect them and how they will view, interpret, and experience this affect.
- 2. **Harm**: Does this option do less harm than any available alternative? Here I try to design an action that will minimize harmful effects. I should factor in the likely results of the action under consideration but I should also evaluate how justly these results will be distributed among stakeholders.
- 3. **Publicity**: What kind of person will I become if I choose this action? This is Davis' formulation of this test as a virtue test. The key to this test is that you associate the agent with the action. If I (the agent) am publicly judged as a person in terms of this action, what does this say about me as a person? Am I comfortable being judged an irresponsible person on the basis of my being identified with my irresponsible action?
- 4. **Meta-Test Convergence**: Do a quick inventory here. Do the ethics tests come together and agree on ranking this solution as a strong one? Then this solution satisfies the convergence meta-test and this provides independent evidence of the strength of the solution.
- 5. **Meta-Test Divergence**: Again, do a quick inventory of your solution evaluation matrix results to this point. Do the tests differ or diverge on this point? This is independent evidence of the weakness of this solution. Think about why this solution may be strong under one test but weak under the others.

6. The solution evaluation matrix presented just below models and summarizes the solution testing process.

Solution/Test	Reversibility	Harm	Publicity	Meta-Test: Convergence	Meta-Test: Divergence
Description	Would I still think the choice of this option good if I were one of those adversely affected by it? (Davis)	Does this option do less harm than any available alternative?	What person would I become were I to choose and perform this action? (Associating my character with the moral color of the action.)	Do the three ethics tests (reversibility, harm, publicity) come together on this solution?	Do the three ethics tests (reversibility, harm, publicity) differ on this solution?
Your best solution					
A good (but not the best) solution					
Your worst solution or a really bad solution					

Solution Evaluation Matrix

Solution Implementation

The chosen solution must be examined in terms of how well it responds to various situational constraints that could impede its implementation. What will be its costs? Can it be implemented within necessary time constraints? Does it honor recognized technical limitations or does it require pushing these back through innovation and discovery? Does it comply with legal and regulatory requirements? Finally, could the surrounding organizational, political, and social environments give rise to obstacles to the implementation of the solution? In general this phase requires looking at interest, technical, and resource constraints or limitations. A Feasibility Matrix helps to guide this process.

The Feasibility Tests focuses on situational constraints. How could these hinder the implementation of the solution? Should the solution be modified to ease implementation? Can the constraints be removed or remodeled by negotiation, compromise, or education? Can implementation be facilitated by modifying both the solution and changing the constraints?

Feasibility Matrix						
Resource Constraints	Technical Constraints	Interest Constraints				
		Personalities				
Time		Organizational				
Cost	Applicable Technology	Legal				
Materials	Manufacturability	Social, Political, Cultural				

Different Feasibility Constraints

- 1. The Feasibility Test identifies the constraints that could interfere with realizing a solution. This test also sorts out these constraints into **resource** (time, cost, materials), **interest** (individuals, organizations, legal, social, political), and **technical** limitations. By identifying situational constraints, problem-solvers can anticipate implementation problems and take early steps to prevent or mitigate them.
- 2. **Time**. Is there a deadline within which the solution has to be enacted? Is this deadline fixed or negotiable?
- 3. **Financial**. Are there cost constraints on implementing the ethical solution? Can these be extended by raising more funds? Can they be extended by cutting existing costs? Can agents negotiate for more money for implementation?
- 4. **Technical**. Technical limits constrain the ability to implement solutions. What, then, are the technical limitations to realizing and implementing the solution? Could these be moved back by modifying the solution or by adopting new technologies?
- 5. **Manufacturability**. Are there manufacturing constraints on the solution at hand? Given time, cost, and technical feasibility, what are the manufacturing limits to implementing the solution? Once again, are these limits fixed or flexible, rigid or negotiable?
- 6. **Legal**. How does the proposed solution stand with respect to existing laws, legal structures, and regulations? Does it create disposal problems addressed in existing regulations? Does it respond to and minimize the possibility of adverse legal action? Are there legal constraints that go against the ethical values embodied in the solution? Again, are these legal constraints fixed or negotiable?
- 7. **Individual Interest Constraints**. Individuals with conflicting interests may oppose the implementation of the solution. For example, an insecure supervisor may oppose the solution because he fears it will undermine his authority. Are these individual interest constraints fixed or negotiable?
- 8. **Organizational**. Inconsistencies between the solution and the formal or informal rules of an organization may give rise to implementation obstacles. Implementing the solution may require support of those higher up in the management hierarchy. The solution may conflict with organization rules, management structures, traditions, or financial objectives. Once again, are these constraints fixed or flexible?
- 9. **Social, Cultural, or Political**. The socio-technical system within which the solution is to be implemented contains certain social structures, cultural traditions, and political ideologies. How do these stand with respect to the solution? For example, does a climate of suspicion of high technology threaten to create political opposition to the solution? What kinds of social, cultural, or political problems could arise? Are these fixed or can they be altered through negotiation, education, or persuasion?

Ethics Tests For Solution Evaluation

Three ethics tests (reversibility, harm/beneficence, and public identification) encapsulate three ethical approaches (deontology, utilitarianism, and virtue ethics) and form the basis of stage three of the SDC, solution testing. A fourth test (a value realization test) builds upon the public identification/virtue ethics test by evaluating a solution in terms of the values it harmonizes, promotes, protects, or realizes. Finally a code

test provides an independent check on the ethics tests and also highlights intermediate moral concepts such as safety, health, welfare, faithful agency, conflict of interest, confidentiality, professional integrity, collegiality, privacy, property, free speech, and equity/access). The following section provides advice on how to use these tests. More information can be found at www.computingcases.org.

Setting Up the Ethics Tests: Pitfalls to avoid

Set-Up Pitfalls: Mistakes in this area lead to the analysis becoming unfocused and getting lost in irrelevancies. (a) Agent-switching where the analysis falls prey to irrelevancies that crop up when the test application is not grounded in the standpoint of a single agent, (b) Sloppy action-description where the analysis fails because no specific action has been tested, (c) Test-switching where the analysis fails because one test is substituted for another. (For example, the public identification and reversibility tests are often reduced to the harm/beneficence test where harmful consequences are listed but not associated with the agent or stakeholders.)

Set up the test

- 1. Identify the agent (the person who is going to perform the action)
- 2. Describe the action or solution that is being tested (what the agent is going to do or perform)
- 3. Identify the stakeholders (those individuals or groups who are going to be affected by the action), and their stakes (interests, values, goods, rights, needs, etc.
- 4. Identify, sort out, and weigh the consequences (the results the action is likely to bring about)

Harm/Beneficence Test

- What harms would accompany the action under consideration? Would it produce physical or mental suffering, impose financial or non-financial costs, or deprive others of important or essential goods?
- What benefits would this action bring about? Would it increase safety, quality of life, health, security, or other goods both moral and non-moral?
- What is the magnitude of each these consequences? Magnitude includes likelihood it will occur (probability), the severity of its impact (minor or major harm) and the range of people affected.
- Identify one or two other viable alternatives and repeat these steps for them. Some of these may be modifications of the basic action that attempt to minimize some of the likely harms. These alternatives will establish a basis for assessing your alternative by comparing it with others.
- Decide on the basis of the test which alternative produces the best ratio of benefits to harms?
- Check for inequities in the distribution of harms and benefits. Do all the harms fall on one individual (or group)? Do all of the benefits fall on another? If harms and benefits are inequitably distributed, can they be redistributed? What is the impact of redistribution on the original solution imposed?

Pitfalls of the Harm/Beneficence Test

- 1. "Paralysis of Analysis" comes from considering too many consequences and not focusing only on those relevant to your decision.
- 2. Incomplete Analysis results from considering too few consequences. Often it indicates a failure of moral imagination which, in this case, is the ability to envision the consequences of each action alternative.
- 3. Failure to compare different alternatives can lead to a decision that is too limited and one-sided.
- 4. Failure to weigh harms against benefits occurs when decision makers lack the experience to make the qualitative comparisons required in ethical decision making.
- 5. Finally, justice failures result from ignoring the fairness of the distribution of harms and benefits. This leads to a solution which may maximize benefits and minimize harms but still give rise to serious injustices in the distribution of these benefits and harms.

Reversibility Test

- 1. Set up the test by (i) identifying the agent, (ii) describing the action, and (iii) identifying the stakeholders and their stakes.
- 2. Use the stakeholder analysis to identify the relations to be reversed.
- 3. Reverse roles between the agent (you) and each stakeholder: put them in your place (as the agent) and yourself in their place (as the one subjected to the action).
- 4. If you were in their place, would you still find the action acceptable?

Cross Checks for Reversibility Test (These questions help you to check if you have carried out the reversibility test properly.)

- Does the proposed action treat others with respect? (Does it recognize their autonomy or circumvent it?)
- Does the action violate the rights of others? (Examples of rights: free and informed consent, privacy, freedom of conscience, due process, property, freedom of expression)
- Would you recommend that this action become a universal rule?
- Are you, through your action, treating others merely as means?

Pitfalls of the Reversibility Test

- Leaving out a key stakeholder relation
- Failing to recognize and address conflicts between stakeholders and their conflicting stakes
- Confusing treating others with respect with capitulating to their demands ("Reversing with Hitler")
- Failing to reach closure, i.e., an overall, global reversal assessment that takes into account all the stakeholders the agent has reversed with.

Steps in Applying the Public Identification Test

- Set up the analysis by identifying the agent, describing the action, and listing the key values or virtues at play in the situation.
- Association the action with the agent.
- Describe what the action says about the agent as a person. Does it reveal him or her as someone associated with a virtue or a vice?

Alternative Version of Public Identification

- Does the action under consideration realize justice or does it pose an excess or defect of justice?
- Does the action realize responsibility or pose an excess or defect of responsibility?
- Does the action realize reasonableness or pose too much or too little reasonableness?
- Does the action realize honesty or pose too much or too little honesty?
- Does the action realize integrity or pose too much or too little integrity?

Pitfalls of Public Identification

- Action not associated with agent. The most common pitfall is failure to associate the agent and the action. The action may have bad consequences and it may treat individuals with respect but these points are not as important in the context of this test as what they imply about the agent as a person who deliberately performs such an action.
- Failure to specify moral quality, virtue, or value. Another pitfall is to associate the action and agent but only ascribe a vague or ambiguous moral quality to the agent. To say, for example, that willfully harming the public is bad fails to zero in on precisely what moral quality this ascribes to the agent. Does it render him or her unjust, irresponsible, corrupt, dishonest, or unreasonable? The virtue list given above will help to specify this moral quality.

Code of Ethics Test

- Does the action hold paramount the health, safety, and welfare of the public, i.e., those affected by the action but not able to participate in its design or execution?
- Does the action maintain faithful agency with the client by not abusing trust, avoiding conflicts of interest, and maintaining confidences?
- Is the action consistent with the reputation, honor, dignity, and integrity of the profession?
- Does the action serve to maintain collegial relations with professional peers?

Meta Tests

- The ethics and feasibility tests will not always converge on the same solution. There is a complicated answer for why this is the case but the simple version is that the tests do not always agree on a given solution because each test (and the ethical theory it encapsulates) covers a different domain or dimension of the action situation. Meta tests turn this disadvantage to your advantage by feeding the interaction between the tests on a given solution back into the evaluation of that solution.
- When the ethics tests converge on a given solution, this convergence is a sign of the strength and robustness of the solution and counts in its favor.
- When a given solution responds well to one test but does poorly under another, this is a sign that the solution needs further development and revision. It is not a sign that one test is relevant while the others are not. Divergence between test results is a sign that the solution is weak.

Application Exercise

You will now practice the four stages of decision making with a real world case. This case, Risk Assessment, came from a retreat on Business, Science, and Engineering Ethics held in Puerto Rico in December 1998. It was funded by the National Science Foundation, Grant SBR 9810253.

Risk Assessment Scenario

Case Scenario: You supervise a group of engineers working for a private laboratory with expertise in nuclear waste disposal and risk assessment. The DOE (Department of Energy) awarded a contract to your laboratory six years ago to do a risk assessment of various nuclear waste disposal sites. During the six years in which your team has been doing the study, new and more accurate calculations in risk assessment have become available. Your laboratory's study, however, began with the older, simpler calculations and cannot integrate the newer without substantially delaying completion. You, as the leader of the team, propose a delay to the DOE on the grounds that it is necessary to use the more advanced calculations. Your position is that the laboratory needs more time because of the extensive calculations required; you argue that your group must use state of the art science in doing its risk assessment. The DOE says you are using overly high standards of risk assessment to prolong the process, extend the contract, and get more money for your company. They want you to use simpler calculations and finish the project; if you are unwilling to do so, they plan to find another company that thinks differently. Meanwhile, back at the laboratory, your supervisor (a high level company manager) expresses to you the concern that while good science is important in an academic setting, this is the real world and the contract with the DOE is in jeopardy. What should you do?

Part One: Problem Specification

- 1. Specify the problem in the above scenario. Be as concise and specific as possible
- 2. Is your problem best specifiable as a disagreement? Between whom? Over what?
- 3. Can your problem be specified as a value conflict? What are the values in conflict? Are the moral, nonmoral, or both?

Part Two: Solution Generation

- 1. Quickly and without analysis or criticism brainstorm 5 to ten solutions
- 2. Refine your solution list. Can solutions be eliminated? (On what basis?) Can solutions be combined? Can solutions be combined as plan a and plan b?

- 3. If you specified your problem as a disagreement, how do your solutions resolve the disagreement? Can you negotiate interests over positions? What if your plan of action doesn't work?
- 4. If you formulated your problem as a value conflict, how do your solutions resolve this conflict? By integrating the conflicting values? By partially realizing them through a value compromise? By trading one value off for another?

Part Three: Solution Testing

- 1. Construct a solution evaluation matrix to compare two to three solution alternatives.
- 2. Choose a bad solution and then compare to it the two strongest solutions you have.
- 3. Be sure to avoid the pitfalls described above and set up each test carefully.

Part Four: Solution Implementation

- 1. Develop an implementation plan for your best solution. This plan should anticipate obstacles and offer means for overcoming them.
- 2. Prepare a feasibility table outlining these issues using the table presented above.
- 3. Remember that each of these feasibility constraints is negotiable and therefore flexible. If you choose to set aside a feasibility constraint then you need to outline how you would negotiate the extension of that constraint.

Decision-Making Presentation

https://cnx.org/content/m13757/

Clicking on this figure will allow you to open a presentation designed to introduce problem solving in ethics as analogous to that in design, summarize the concept of a sociotechnical system, and provide an orientation in the four stages of problem solving. This presentation was given February 28, 2008 at UPRM for ADMI 6005 students, Special Topics in Research Ethics.

Problem Solving Presentation

https://cnx.org/content/m13757/

Shortened Presentation for Fall 2012 https://cnx.org/content/m13757/

Vigo Socio-Technical System Table and Problems

https://cnx.org/content/m13757/ Decision Making Worksheet

https://cnx.org/content/m13757/

This exercise is designed to give you practice with

the three frameworks described in this module. It is based on the case, "When in Aguadilla."

Test Rubric Fall 2009: Problem-Solving https://cnx.org/content/m13757/

Ethics of Teamwork

This module developed for classes in Engineering and Computer Ethics at UPRM employs a value/virtue approach to encourage students to reflect on the ethical issues and problems that arise in group or team work. Throughout the class, students are given group assignments for which they receive group grades that are distributed to each individual member. The module then provides students with ethical goals to grade them as they execute these assignments. Student groups develop strategies for realizing these goals. They also envision pitfalls that often prevent groups from working cooperatively such as the Abilene Paradox, groupthink, and group polarization. Finally, students develop an assessment process based on these goals that they use to complete a group self-evaluation at the end of the semester. The primary purpose of this module is to use group work and cooperative learning as an occasion to reflect on the different ethical issues and problems that arise in collective activity. This module is being developed as a part of an NSF-funded project, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF SES 0551779.

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Module Introduction

Much of your future work will be organized around group or team activities. This module is designed to prepare you for this by getting you to reflect on ethical and practical problems that arise in small groups like work teams. Four issues, based on well-known ethical values, are especially important. How do groups achieve justice (in the distribution of work), responsibility (in specifying tasks, assigning blame, and awarding credit), reasonableness (ensuring participation, resolving conflict, and reaching consensus), and honesty (avoiding deception, corruption, and impropriety)? This module asks that you develop plans for realizing these moral values in your group work this semester. Furthermore, you are provided with a list of some of the more common pitfalls of group work and then asked to devise strategies for avoiding them. Finally, at the end of the semester, you will review your goals and strategies, reflect on your successes and problems, and carry out an overall assessment of the experience.

Module Activities

- 1. Groups are provided with key ethical values that they describe and seek to realize thorugh group activity.
- 2. Groups also study various obstacles that arise in collective activity: the Abilene Paradox, Groupthink, and Group Polarization.
- 3. Groups prepare initial reports consisting of plans for realizing key values in their collective activity. They also develop strategies for avoiding associated obstacles.
- 4. At the end of the semester, groups prepare a self-evaluation that assesses success in realizing ethical values and avoiding obstacles.
- 5. Textboxes in this module describe pitfalls in groups activities and offer general strategies for preventing or mitigating them. There is also a textbox that provides an introductory orientation on key ethical values or virtues.

A Framework for Value-Integration

The objective of this module is to teach you to teach yourselves how to work in small groups. You will develop and test procedures for realizing value goals and avoiding group pitfalls. You will also use Socio-Technical System Analysis to help you understand better how to take advantage of the way in which different environments enable groups activities and to anticipate and minimize the way in which other environments can constrain or even oppose group activities.

• **Discovery**: "The goal of this activity is to 'discover' the values that are relevant to, inspire, or inform a given design project, resulting in a list of values and bringing into focus what is often implicit in a design project." [Flanagan et al. 323]. Discovery of group values is a trial and error process. To get started, use the ADEM Statement of Values or the short value profiles listed below.

- Translation: "[T]ranslation is the activity of embodying or expressing...values in a system design. Translation is further divided into operationalization, which involves defining or articulating values in concrete terms, and implementation which involves specifying corresponding design features" [Flanagan et al., 338]. You will operationalize your values by developing profiles. (See below or the ADEM Statement of Values for examples.) Then you will implement your values by developing realization procedures. For example, to realize justice in carrying out a group task, first we will discuss the task as a group, second we will divide it into equal parts, third, forth, etc.
- **Verification**: "In the activity of verification, designers assess to what extent they have successfully implemented target values in a given system. [Strategies and methods] may include internal testing among the design team, user testing in controlled environments, formal and informal interviews and surveys, the use of prototypes, traditional quality assurance measures such as automated and regression-oriented testing and more" [Flanagan et al., 344-5]. You will document your procedures in the face of different obstacles that may arise in your efforts at value-realization. At the end of your semester, you will verify your results by showing how you have refined procedures to more effectively realize values.

The framework on value realization and the above-quoted passages can be found in the following resource: M. Flanagan, D. Howe, and H. Nissenbaum, "Embodying Values in Technology: Theory and Practice," in **Information Technology and Moral Philosophy**, Jeroen van den Hoven and John Weckert, Eds. Cambridge, UK: Cambridge University Press, 2008, pp. 322-353.

Value Profiles for Professional Ethics

- 1. Definition A **value** "refers to a claim about what is worthwhile, what is good. A value is a single word or phrase that identifies something as being desirable for human beings." Brincat and Wike, Morality and the Professional Life: Values at Work
- 2. **Reasonableness** Defusing disagreement and resolving conflicts through integration. Characteristics include seeking relevant information, listening and responding thoughtfully to others, being open to new ideas, giving reasons for views held, and acknowledging mistakes and misunderstandings. (From Michael Pritchard, Reasonable Children)
- 3. **Responsibility** The ability to develop moral responses appropriate to the moral issues and problems that arise in one's day-to-day experience. Characteristics include avoiding blame shifting, designing overlapping role reponsibilities to fill responsibility "gaps", expanding the scope and depth of general and situation-specific knowledge, and working to expand control and power.
- 4. **Respect** Recognizing and working not to circumvent the capacity of autonomy in each individual. Characteristics include honoring rights such as privacy, property, free speech, due process, and participatory rights such as informed consent. Disrespect circumvents autonomy by deception, force, or manipulation.
- 5. **Justice** Giving each his or her due. Justice breaks down into kinds such as distributive (dividing benefits and burdens fairly), retributive (fair and impartial administration of punishments), administrative (fair and impartial administration of rules), and compensatory (how to fairly recompense those who have been wrongfully harmed by others).
- 6. **Trust** According to Solomon, trust is the expectation of moral behavior from others.
- 7. **Honesty** Truthfulness as a mean between too much honesty (bluntness which harms) and dishonesty (deceptiveness, misleading acts, and mendaciousness).
- 8. **Integrity** A meta-value that refers to the relation between particular values. These values are integrated with one another to form a coherent, cohesive and smoothly functioning whole. This resembles Solomon's account of the virtue of integrity.

Exercise 1: Developing Strategies for Value Realization

Directions

- 1. Identify value goals. Start with two or three. You can add or subtract from these as the semester progresses.
- 2. Give a brief description of each using terms that reflect your group's shared understandings. You may use the descriptions in this module or those in the ADEM Statement of Values but feel free to modify these to fit your group's context. You could also add characteristics and sample rules and aspirations.

3. For each value goal, identify and spell out a procedure for realizing it. See the examples just below for questions that can help you develop value procedures for values like justice and responsibility.

Examples

- Design a plan for realizing key moral values of team work. Your plan should address the following valuebased tasks
- How does your group plan on realizing justice? For example, how will you assign tasks within the group that
 represent a fair distribution of the work load and, at the same time, recognize differences in individual
 strengths and weaknesses? How does your group plan on dealing with members who fail to do their fair
 share?
- How does your group plan on realizing responsibility? For example, what are the responsibilities that members will take on in the context of collective work? Who will be the leader? Who will play devil's advocate to avoid groupthink? Who will be the spokesperson for the group? How does your group plan to make clear to each individual his or her task or role responsibilities?
- How does your group plan on implementing the value of reasonableness? How will you guarantee that each individual participates fully in group decisions and activities? How will you deal with the differences, non-agreements, and disagreements that arise within the group? What process will your group use to reach agreement? How will your group insure that every individual has input, that each opinion will be heard and considered, and that each individual will be respected?
- How does your group plan on implementing the value of (academic) honesty? For example, how will you avoid cheating or plagiarism? How will you detect plagiarism from group members, and how will you respond to it?
- Note: Use your imagination here and be specific on how you plan to realize each value. Think preventively (how you plan on avoiding injustice, irresponsibility, injustice, and dishonesty) and proactively (how you can enhance these values). Don't be afraid to outline specific commitments. Expect some of your commitments to need reformulation. At the end of the semester, this will help you write the final report. Describe what worked, what did not work, and what you did to fix the latter.

Obstacles to Group Work (Developed by Chuck Huff for Good Computing: A Virtue Approach to Computer Ethics)

- 1. The **Abilene Paradox**. "The story involves a family who would all rather have been at home that ends up having a bad dinner in a lousy restaurant in Abilene, Texas. Each believes the others want to go to Abilene and never questions this by giving their own view that doing so is a bad idea. In the Abilene paradox, the group winds up doing something that no individual wants to do because of a breakdown of intra-group communication." (From Huff, Good Computing, an unpublished manuscript for a textbook in computer ethics. See materials from Janis; complete reference below.)
- 2. Groupthink. The tendency for very cohesive groups with strong leaders to disregard and defend against information that goes against their plans and beliefs. The group collectively and the members individually remain loyal to the party line while happily marching off the cliff, all the while blaming "them" (i.e., outsiders) for the height and situation of the cliff. (Also from Huff, Good Computing, an unpublished manuscript for a textbook in computer ethics.)
- 3. **Group Polarization**. Here, individuals within the group choose to frame their differences as disagreements. Framing a difference as non-agreement leaves open the possibility of working toward agreement by integrating the differences or by developing a more comprehensive standpoint that dialectally synthesizes the differences. Framing a difference as disagreement makes it a zero sum game; one's particular side is good, all the others bad, and the only resolution is for the good (one's own position) to win out over the bad (everything else). (Weston provides a nice account of group polarization in Practical Companion to Ethics. This is not to be confused with Cass Sunstein's different account of group polarization in **Infotopia**.)
- 4. Note: All of these are instances of a social psychological phenomenon called conformity. But there are other processes at work too, like group identification, self-serving biases, self-esteem enhancement, self-fulfilling prophecies, etc.

More Obstacles to Group Work

- **Free Riders**: Free riders are individuals who attempt to "ride for free" on the work of the other members of the group. Some free riders cynically pursue their selfish agenda while others fall into this pitfall because they are unable to meet all their obligations. (See conflict of effort.)
- Outliers: These are often mistaken for free riders. Outliers want to become participants but fail to become fully integrated into the group. This could be because they are shy and need encouragement from the other group members. It could also be because the other group members know one another well and have habitual modes of interaction that exclude outsiders. One sign of outliers; they do not participate in group social activities but they still make substantial contributions working by themselves. ("No, I can't come to the meeting--just tell me what I have to do.")
- **Hidden Agendas**: Cass Sunstein introduces this term. A group member with a "hidden agenda" has something he or she wants to contribute but, for some reason or other, hold back. For example, this individual may have tried to contribute something in the past and was "shot down" by the group leader. The next time he or she will think, "Let them figure it out without me."
- Conflict of Effort: conflict of Effort often causes an individual to become a free rider or an outlier. These group members have made too many commitments and come unraveled when they all come due at the same time. Students are often overly optimistic when making out their semester schedules. They tightly couple work and class schedules while integrating home responsibilities. Everything goes well as long as nothing unusual happens. But if a coworker gets sick and your supervisor asks you to come in during class times to help out, or you get sick, it becomes impossible to keep the problem from "spilling out" into other areas of your schedule and bringing down the whole edifice. Developing a schedule with periods of slack and flexibility can go a long way toward avoiding conflict of effort. Groups can deal with this by being supportive and flexible. (But it is important to draw the line between being supportive and carrying a free rider.)

Best Practices for Avoiding Abilene Paradox

- At the end of the solution generating process, carry out an anonymous survey asking participants if anything was left out they were reluctant to put before group.
- Designate a Devil's Advocate charged with criticizing the group's decision.
- Ask participants to reaffirm group decision--perhaps anonymously.

Best Practices for Avoiding Groupthink (Taken from Janis, 262-271)

- "The leader of a policy-forming group should assign the role of critical evaluator to each member, encouraging the group to give high priority to airing objections and doubts."
- "The leaders in an organization's hierarchy, when assigning a policy-planning mission to a group, should be impartial instead of stating preferences and expectations at the outset."
- "Throughout the period when the feasibility and effectiveness of policy alternatives are being surveyed, the policy-making group should from time to time divide into two or more subgroups to meet separately...."
- One or more outside experts or qualified colleagues within the organization who are not core members of the policy-making group should be invited to each meeting ...and should be encouraged to challenge the views of the core members."
- "At every meeting devoted to evaluating policy alternatives, at least one member should be assigned the role
 of devil's advocate."

Best Practices for Avoiding Polarizatoin (Items taken from "Good Computing: A Virtue Approach to Computer Ethics" by Chuck Huff, William Frey and Jose Cruz (Unpublished Manuscript)

- Set Quotas. When brainstorming, set a quota and postpone criticism until after quota has been met.
- **Negotiate Interests, not Positions.** Since it is usually easier to integrate basic interests than specific positions, try to frame the problem in terms of interests.
- **Expanding the Pie.** Conficts that arise from situational constraints can be resolved by pushing back those constraints through negotiation or innovation..
- **Nonspecific Compensation.** One side makes a concession to the other but is compensated for that concession by some other coin.
- **Logrolling.** Each party lowers their aspirations on items that are of less interest to them, thus trading off a concession on a less important item for a concession from the other on a more important item.

- **Cost-Cutting.** One party makes an agreement to reduce its aspirations on a particular thing, and the other party agrees to compensate the party for the specific costs that reduction in aspirations involves.
- **Bridging.** Finding a higher order interest on which both parties agree, and then constructing a solution that serves that agreed-upon interest.

Exercise 2 - Avoiding the Pitfalls of Group Work

- Design a plan for avoiding the pitfalls of group work enumerated in the textbox above.
- How does your group plan on avoiding the Abilene Paradox?
- How does your group plan on avoiding Group Polarization?
- How does your group plan on avoiding Groupthink?
- Note: Use imagination and creativity here. Think of specific scenarios where these obstacles may arise, and what your group can do to prevent them or minimize their impact.

Exercise 3: Socio Technical System

Your group work this semester will take place within a group of nested or overlapping environments. Taken separately and together, these will structure and channel your activity, facilitating action in certain circumstances while constraining, hindering, or blocking it in others. Prepare a socio-technical system table for your group to help structure your group self-evaluation. Include hardware/software, physical surroundings, stakeholders (other groups, teacher, other classes, etc.), procedures (realizing values, avoiding pitfalls), university regulations (attendance), and information structures (collecting, sharing, disseminating)

Some things about Socio-Technical Systems

- 1. Socio-Technical System Analysis provides a tool to uncover the different environments in which business activity takes place and to articulate how these constrain and enable different business practices.
- 2. A socio-technical system can be divided into different components such as hardware, software, physical surroundings, people/groups/roles, procedures, laws/statutes/regulations, and information systems.
- 3. But while these different components can be distinguished, they are in the final analysis inseparable. STSs are, first and foremost, systems composed of interrelated and interacting parts.
- 4. STSs also embody values such as moral values (justice, responsibility, respect, trust, integrity) and non-moral values (efficiency, satisfaction, productivity, effectiveness, and profitability). These values can be located in one or more of the system components. They come into conflict with one another causing the system to change.
- 5. STSs change and this change traces out a path or trajectory. The normative challenge of STS analysis is to find the trajectory of STS change and work to make it as value-realizing as possible.

Hardware/Software	Physical Surroundings	Stakeholders	Procedures	University Regulations	Information Structures
Think about the new role for your smart phones in group work in class. Will you be using Google Docs to exchange documents?	How does the classroom and the arrangement of objects within it constrain and enable group activities?	Think about other teachers, classes, supervisors, jobs, and other individuals that can have an impact on	Name but don't describe in detail, the value-realizing procedures your group is adopting.	What are university regulations that will have an impact on your group work. For example, switches between	There is a wealth of information and skill locked in each of your group's members. How will you unleash these and telescope them into

your ability to carry out group assignments.	MWF and TTH schedules.	group work and activities? How, in other words, will you work to maximize group synergies and minimize group disadvantages?
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Socio-Technical System Table for Groups

Exercises 1-3 compose the Preliminary Self-Evaluation which is due shortly after semester-long groups are formed. Exercise 4 is the close-out group self evaluation which is due at the end of the semester.

Exercise 4: Prepare a Final, Group Self-Evaluation

- Due Date: One week after the last class of the semester when your group turns in all its materials.
- Length: A minimum of five pages not including Team Member Evaluation Forms
- Contents:
- 1. Restate the Ethical and Practical Goals that your group developed at the beginning of its formation.
- 2. Provide a careful, documented assessment of your group's success in meeting these goals. (Don't just assert that "Our group successfully realized justice in all its activities this semester." How did your group characterize justice in the context of its work? What specific activities did the group carry out to realize this value? What, among these activities, worked and what did not work?)
- 3. Identify obstacles, shortcomings or failures that you group experienced during the semester. How did these arise? Why did they arise? How did you respond to them? Did your response work? What did you learn from this experience?
- 4. Assess the plans you set forth in your initial report on how you intended to realize values and avoid pitfalls. How did these work? Did you stick to your plans or did you find it necessary to change or abandon them in the face of challenges?
- 5. Discuss your group's procedures and practices? How did you divide and allocate work tasks? How did you reach consensus on difficult issues? How did you ensure that all members were respected and allowed significant and meaningful participation? What worked and what did not work with respect to these procedures? Will you repeat them in the future? Would you recommend these procedures as best practices to future groups?
- 6. What did you learn from your experience working as a team this semester? What will require further reflection and thought? In other words, conclude your self-evaluation with a statement that summarizes your experience working together as a team this semester.

Appendix for ADMI 4016, Falkl 2013 and following

- What are the results of your group's challenge to the College of Business Administration's Statement of Values? (This can be found in Developing Ethics Codes and Statements of Value. See exercise 2. http://cnx.org/content/m14319/1.11/
- What is your group's CID Structure? See presentation two at the bottom of the module, A Short History of the Corporation. http://cnx.org/content/m17314/1.7/

Wrap Up: Some further points to consider...

1. Don't gloss over your work with generalizations like, "Our group was successful and achieved all of its ethical and practical goals this semester." Provide evidence for success claims. Detail the procedures designed by your group to bring about these results. Are they "best practices"? What makes them best practices?

- 2. Sometimes—especially if difficulties arose—it is difficult to reflect on your group's activities for the semester. Make the effort. Schedule a meeting after the end of the semester to finalize this reflection. If things worked well, what can you do to repeat these successes in the future? If things didn't work out, what can you do to avoid similar problems in the future? Be honest, be descriptive and avoid blame language.
- 3. This may sound harsh but get used to it. Self-evaluations—group and individual—are an integral part of professional life. They are not easy to carry out, but properly done they help to secure success and avoid future problems.
- 4. Student groups—perhaps yours—often have problems. This self-evaluation exercise is designed to help you face them rather than push them aside. Look at your goals. Look at the strategies you set forth for avoiding Abilene, groupthink, and group polarization. Can you modify them to deal with problems? Do you need to design new procedures?

Ethics of Team Work Presentations

Values in Team Work (Thought Experiments) https://cnx.org/content/m13760/

Pitfalls to Avoid in Group Work https://cnx.org/content/m13760/

Thought Experiments on Group Work https://cnx.org/content/m13760/

Team Member Evaluation Forms (Required) https://cnx.org/content/m13760/

New Ethics of Teamwork Presentation (Spring 2012) https://cnx.org/content/m13760/

Ethics of Teamwork Jeopardy

https://cnx.org/content/m13760/

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Business and Moral Leaders

This module is based on the hypothesis that moral exemplars make good--even excellent--leaders. It is a derived copy of a module published previously on moral exemplars. This module explored this topic as a gateway to virtue ethics and as an alternative to the big-news / bad news approach to business ethics. This derived copy adds three layers of content: (1) a brief discussion of business leadership taken from Petrick and Quinn's outstanding book, Management Ethics: Integrity at Work. Next, it adds a discussion of two historical figures, Thomas More and Thomas Cromwell. More was portrayed as a moral exemplar in Robert Bolt's play and the movie, A Man for All Seasons while Cromwell was his Machiavellian opponent. Recently, Hilary Mantel has reversed Bolt's assessment in her two books, Wolf Hall and Bring Up the Bodies. Mantel's More is a religious fanatic while Cromwell, the central character in these novels, is presented as a humanitarian political administrator. An exercise based on these portrayals will provide an opportunity to examine whether there are multiple models or paradigms of moral exemplars. Finally, an attempt has been made to update and expand the list of moral exemplars available for study. Carmen Segarra (portrayed in This American Life), Sallie Krawcheck (profiled in the PBS Online News Hour), and Vandana Shiva (also portrayed in the News Hour) provide an interesting array of moral exemplar candidates for the modern scene. These layers built upon the core module on moral exemplars provide a resource ideal for integration into introductory business courses. Consistent with the past, this module originated as a part of an NSF-funded project, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF SES 0551779. It is also being deployed in the context of two more recent grants, GREAT IDEA (NSF/EESE 1033028) and Cultivating Responsible Well-Being in STEM (NSF SES 1449489)

Business Leadership

First, consider an argument that is frequently made. Hitler was a bad--in fact a horrible--person. But he was a good leader. Even though he led in the wrong direction, toward the wrong goals, for the wrong reasons, he led effectively. He got things done. In other words, he was adept at devising effective and efficient means toward already determined ends.

The starting (and finishing) point of this module is that a business leader--or any other leader--cannot be a good leader without, at the same time, being a moral or ethical leader. To illustrate this point, we will look at the analysis of leadership

given by Joseph A Petrick and John F. Quinn in their book, **Management Ethics: Integrity at Work** (Sage,1997: 210-214).

Petrick and Quinn provide the following definition of leadership: "Leading is the intended, coordinated, emergent and realized pattern of decision processes and actions that induce or influence the character and conduct of organizational members in appropriate directions by using appropriate resources." (210) They proceed to unpack this definition by means of a series of useful lists (212).

"Culpably negligent leading"

- "absence of explicitly intended leadership vision"
- "inefficiently coordinated leadership style matches"
- "leading that is rigidly unresponsive to emergent contingencies"
- "inadequately realized leadership opportunities"
- "unintegrated patterns of leadership processes and actions"
- "leading that misdirects core business processes"
- "leadership that persists in disrespecting people"
- Consider some of the key words in this list as well as their opposites:
 vision, inefficiency (efficiency), unresponsiveness (responsiveness),
 unintegrated (integrated), misdirection (direction), and disrespecting
 (respecting). This negative list implies a positive list that includes values
 and virtues. Good leadership here is morally good leadership because it
 includes vision, integrity (integrating "processes and
 actions")responsiveness (and taking responsibility), and respect, especially
 respect for owners, customers, and employees.

The table just below compares a list of leadership traits identified by Petrick and Quinn with a list of engineering ethical virtues identified by Pritchard and Jaska. There are many values in common such as creativity, cooperativeness, persistence, and integrity. One important discrepancy: while the engineering list includes "willingness to sacrifice self-interest" there is no reference to this in the business list. (In fact, much of the research in business in academia assumes that humans necessarily act on the basis of self-interest; their actions can be predicted on the basis of assuming that they are rational self-interest maximizers.) There are also differences in emphasis; compare ambition to "not being too ambitious" and think about the subtle difference expressed here. (See Pritchard, M. (1998). "Professional Responsibility: Focusing on the Exemplary." Science and Engineering Ethics, Volume 4, Issue 2: 215-233.)

Petrick and Quinn Business leadership traits		Pritchard and Jaska: Engineering Ethical Virtues	
Intelligence	Tolerance of stress	Integrity	Perseverance
Knowledge	Tolerance of stress	Honesty	Creative Engineering Imagination
Emotional stability	Personal Integrity	Cooperativeness	Willingness to sacrifice self-interest
Adaptability	Resourcefulness	Courage	Not being too ambitions
Alertness	Ambition	Ability to communicate	Caring about engineering per-se
Assertiveness	Achievement- oriented	Habit of documenting	Macroscopic vision (as well as microscopic vision)
Decisive judgment	Cooperativeness	Openness to correction	Civic- mindedness
Energetic	Dependability	cooperativeness	Competence
Persistence	Dominance	Willingness to compromise	Commitment to quality

Self- Willingness to confidence assume responsibility	
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List 2: Positive Leadership TraitsPetrick and Quinn (212) set forth a list of positive leadership traits. These are compared to engineering ethics virtues that have been identified by Pritchard and Jaska.

Pritchard and Jaska's list came about when they asked morally exemplary engineers to list the traits they would look for were they conducting a job search for hiring engineers for newly opening positions. (A certain degree of modesty or humility prevented those engineers interviewed from attributing these traits to themselves.) Now, think about the following questions. What traits do business leaders and morally exemplary engineers have in common? What traits lay out their differences? Why would engineers and business leaders have certain traits in common? What new skills do engineers have to learn in order to become successful business managers?

Skills sought for good business leadership

Pertick and Quinn go on to identify different bypes of leaders based on skill sets. There are four groupings or sets of skills listed on page 213 of their text.

- **Technical Skills**. These include skills in quantitative and qualitative methods. Rakesh Khurana in his book, From Higher Aims to Hired Hands, points out that much of business research is divided between methods and principles taken from sociology and those taken from economics. One important import from economics is what has been termed by many as "homo economicus," the view described above that human beings are rational self-interest maximizers and, therefore, incapable of altruistic actions or motives.
- **Interpersonal skills**. Quinn and Petrick are quite interesting here. Their list includes "emotional expressivity, sensitivity and control, social expressivity, political sensitivity, control and manipulation, affective communication, and persuasiveness." These strong social skills would not be as important for engineers and other professionals but are essential for business leaders, especially managers. Consider some of the interpersonal skills deployed using the ethics tests we have studied this semester. This would include role-talking and empathy deployed in the **reversibility** test, imaginative projection of experience as deployed by the **harm** test, and the ability to

- imagine and project a moral exemplar into a concrete situation, a skill deployed in the **publicity** test.
- **Conceptual skills**. These include "anticipation of changing trends and opportunities, diagnostic analysis of problems, integrative prognosis of ongoing improvement and/or problem resolution, proficiency in conceptualization of complex and ambiguous relationships, creativity in idea generation and articulation, and sound logical reasoning." This seems to overlap considerably with the problem-solving framework that we have studied this semester: problem specification, solution generation, soluting testing, and solution implementation.
- Administrative skills include "effective work organization, prioritized operational obligations, efficient and timely in-basket processing of information, rapid routine decision making, constant monitoring of performance, solid control of financial resources, and sharp attention to detail." Assigning work tasks, for example, would draw heavily from nonlinear, systems thinking. One would have to integrate such variables as areas of expertise, ability to get along with other members of the team, current and previous work assignments, expertise and how this expertise complements the backgrounds of the other members of the team.

Argument that Business Leadership is built on Moral Leadership

Argument that a bad human cannot be a good leader

- **Premise 1**. To argue that a bad person can be a good leader is to relegate leadership to effectiveness, i.e., a good leader is someone who gets things done, no matter what.
- **Premise 2**: But this separates means from ends and reduces leadership to devising means to predetermined or pre-established ends.
- **Conclusion 1**: But this contradicts the lists presented above that leaders have vision, inspire others, and take responsibility for their actions. It also contradicts the idea that leaders envision ends as well as devise means.
- **Conclusion 2**: If an argument leads to a contradictory conclusion, then it must be rejected and its contradictory affirmed in its place. Hence, business leaders not only are efficient but they are also morally good.

Separating Good Moral Characteristics from Good Leadership Characteristics

Now consider the following table. Colby and Damon in **Some Do Care** outline what they used as moral exemplar criteria for their identification and interview of the moral exemplars that are profiled in their book. They provide two lists, a longer preliminary list and a shorter, more refined list. The unrefined list is more suggestive even though it is a bit ambiguous. What do these moral exemplar criteria have to say about leadership in business? Again, do they suggest that good moral qualities can be separated absolutely from good leadership qualities? (303-304)

Moral Exemplar Criteria from Colby and Damon	Comments on a possible redescription as business leader criteria
"A sustained commitment to definable moral principles."	Business leaders could add to moral principles organizational values (vision, mission, values) and a commitment to general business disciplinary values like open competition, fair play, and orientation toward common good. A difficulty arises when moral principles come into conflict with an organization's self-defined interests.
A consistent tendency to act in accordance with these principles.	This argues that commitments are carefully and thoroughly integrated into the core self-system. For example, one exercises the moral value of loyalty toward one's company and the overall practice of business. But this loyalty is not automatically moral because it is (or may be) uncritical. This breaks down when there is a conflict between business and moral values.
A willingness to affirm (rather than deny or misrepresent)	This is a strong link between moral exemplars and business leaders. Several leadership lists discuss the importance for being responsive, accepting ownership or responsibility for one's acts, and

one's acts, and to overtly express the principles that constitute one's moral rational for such acts.	acting out of respect for others, especially owners, coworkers, employees, and customers.
A willingness to risk personal well-being for the sake of one's moral principles.	This raises issues debated between agency theorists and stewardship, stakeholder, and alliance theorists. Economic theory denies the predictability of actions other than those based on self-interest. But this is debated and rejected by economists such as Akerlof and Shiller (Animal Spirits) and Sen (Rational Fools).
A capacity for crafting and projecting a moral vision including particularly the ability to generate innovative solutions to moral problems.	This module offers considerable evidence in the form of profiles that business leaders who are also moral exemplars can inspire and lead by projecting a moral as well as a business vision. See Krawcheck, Yunus, Segarra, and Fuerstein.
A talent for inspiring others to moral action(7,1)	Business leaders are certainly helped when they have the capability of motivating and inspiring; and this capability is inseparable from being exercised in a moral direction.
A dedicated responsiveness to the lives of others.	An example of a culpably negligent business leadership activity is lack of responsiveness.

Moral Exemplar Criteria and Discussion of Business ApplicabilityThis table outlines moral exemplar criteria taken from Colby and Damon. This it comments on it from the business side to determine if good business leaders are also morally exemplary.

Introduction to Moral Exemplars

Through the activities of this module you will learn to balance cautionary tales in business and professional ethics with new stories about those who consistently act in a morally exemplary way. While cautionary tales teach us what to avoid, narratives from the lives of moral exemplars show us how to be good. A study of moral best practices in business and professional ethics shows that moral exemplars exhibit positive and learnable skills. This module, then, looks at moral exemplars in business and the professions, outlines their outstanding accomplishments, and helps you to unpack the strategies they use to overcome obstacles to doing good.

You will begin by identifying outstanding individuals in business and associated practices who have developed moral "best practices." Your task is look at these individuals, retell their stories, identify the skills that help them do good, and build a foundation for a more comprehensive study of virtue in occupational and professional ethics.

Moral Exemplar Terms

Moral Exemplar

- An individual who demonstrates outstanding moral conduct often in the face of difficult or demanding circumstances. (Beyond the "call of duty" Your first item here
- Often moral exemplars perform actions that go beyond what is minimal, required, ordinary, or even extra-ordinary.
- Moral exemplars perform actions that are "above and beyond the call of duty."
- Most important, they perform these actions repeatedly across a career or even a lifetime. In some way, their exemplary conduct has become "second nature."

Supererogatory

• "A supererogatory act is an act that is beyond the call of duty. It is something that is morally good to do but not obligatory. Examples of supererogatory acts are donating blood, volunteering on a rape crisis hotline, babysitting (without accepting recompense) a friend's two-year

- old triplets for the afternoon, or throwing oneself on a live hand grenade in order to save one's buddies' lives." (Baron, 1997: 614)
- Baron's definition (found in the Encyclopedia of Business Ethics) captures
 how the supererogatory occupies a moral space well above that of the
 minimally decent or even the ordinary. Your second item here.
 Supererogatory actions are outstanding, extra-ordinary, and exemplary in
 both moral and practical senses.
- Urmsom, a moral philosopher, remarks how the supererogatory has been neglected (up to the mid-twentieth century) by moral philosophy, dominated as it was in the previous century by the debate between Utilitarianism and Deontology.
- Two quotations from Urmson show this clearly: (1)"But it does seem that these facts have been neglected in their general, systematic accounts of morality. It is indeed easy to see that on some of the best-known theories there is no room for such facts" (Urmson, 1958, p. 206). (2)"[s]imple utilitarianism, Kantianism, and intuitionism, then, have no obvious theoretical niche for the saint and the hero" (Urmson, 1958: 207).
- Baron, M. (1997). "Supererogation", Blackwell Encyclopedic Dictionary of Business Ethics, Patricia H. Werhane and R. Edward Freeman, eds., New York: Blackwell: 614-7.
- Urmson, J.O. (1958). "Saints and Heroes." Essays in Moral Philosophy, A.I. Melden, ed., Seattle: University of Washington Press: 198-216.

Moral Minimum

- Compare and distinguish the idea of the supererogatory with that of the moral minimum.
- The difference is between that which is morally exemplary versus that which is just over the threshold of wrongdoing.
- "I suggest that moral minimums are best understood as negative standards, universally agreed upon "bottom lines" beyond which it is morally questionable to act. For example, it is almost always wrong to deliberately harm or contribute to harming another person or persons; to deliberately violate their rights to freedom, life, or property; to treat individuals or classes of individuals with disrespect; to compete or cooperate unfairly; not to honor promises or contract; or to be dishonest or deceitful. Whereas these moral minimums do not define goodness, fairness, or benefit, or define the positive content of rights,

- they set minimum guidelines for behavior that most people everywhere might agree on...." (Werhane, 1999: 122).
- Werhane, P. (1999). Moral Imagination and Management Decision-Making, Oxford, UK: Oxford University Press.

Moral Exemplar Criteria in Computing

- 1. Either a sustained commitment to moral ideals or ethical principles in computing that include a generalized respect for humanity or sustained evidence of moral virtue in the practice of computing.
- 2. A disposition to make computing decisions in accord with one's moral ideals or ethical principles, implying a consistency between one's actions and intentions and between the means and ends of one's actions
- 3. A willingness to risk one's self interest for the sake of one's moral values.
- 4. A tendency to be inspiring to other computer professional and thereby to move them to moral action
- 5. A sense of realistic humility about one's own importance relative to the world at large, implying a relative lack of concern for one's own ego.
- 6. Huff, C. and Barnard, L. (2009). "Good Computing: Moral Exemplars in the Computing Profession", IEEE Technology and Society Magazine: 47-54.

Responders and Idealists

- This quotation from Blum provides a nice characterization of "moral responders."
- "the 'responder' moral exemplar does not, prior to confronting situations in which she manifests moral excellence, possess a set of moral principles which she has worked out explicitly, committed herself to, and attempted to guide her life by."
- "the responder responds to the situations she faces and to individuals in a 'morally excellent way."".
- Blum, L. (1994). "Moral Exemplars: reflections on Schindler, the Trochmés, and others", Moral Perception and Particularity, Cambridge, Mass.: Cambridge University Press: 65-97.

Idealists

 According to Blum (and Hailie), Magda Trochme is a responder while her husband, Andre Trochme is an idealist. Both perform morally exemplary

- and supererogatory actions but out of different motivations.
- "To be an idealist [one] must see these ideals as more than merely personal goals or a personal conception of the good. They must be formulated as general values, and regarded by the agent as having some kind of intrinsic worth or general validity.
- Blum, L. (1994). "Moral Exemplars: reflections on Schindler, the Trochmés, and others", Moral Perception and Particularity, Cambridge, Mass.: Cambridge University Press: 65-97.

Moral Heroes and Moral Saints

- Moral heroes achieve their good and excellent goals only by making substantial sacrifices. The notion of self-sacrifice is the key distinguishing characteristic of this kind of exemplar.
- What distinguishes moral saints from other kinds of moral exemplar is the criterion of moral faultlessness; these exemplars achieve their excellences by means of conduct that is free from any moral flaw.
- Moral saints are often used to argue for the unity of virtues thesis, namely, that the virtues work together forming a system where each is necessary and mutually supports the others.

	Moral Heroes (complete a good project at considerable risk to self)	Moral Saints (meet a higher standard of moral purity)
Idealists (Act on the basis of moral principle-duty for duty's sake)	Andre Trochme (acts stem from religious principles); Thomas More (according to Robert Bolt in Man for All Seasons); Martin Luther King (See Letters from Birmingham Jail)	Thomas More (See Robert Bolt's characterization of More as a "saint of selfhood")
Responders	Magda Trochme (Responded to	Mother Teresa

(respond to need and moral salience present in current situation)	needs of refugees); Oscar Schindler (responded to immanent threat of Nazi persecution of his Jewish employees); Mantel's portrayal of Cromwell (Cromwell because of his childhood difficulties took in young men and trained them in business and politics)	and Saint Francis
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Crossing over saints and heroes with idealists and responders This table crosses over saints and heroes with idealists and responders.

Exercise 1: Choose a moral exemplar

- Identify a moral exemplar and provide a narrative description of his or her life story.
- To get this process started, look at the list of moral exemplars provided in this module. The links in the upper left hand corner of this module will help you to explore their accomplishments in detail. Feel free to choose your own exemplar. Make sure you identify someone in the occupational and professional areas such as business and engineering. These areas have more than their share of exemplars, but they tend to escape publicity because their actions avoid publicity generating disasters rather than bring them about.

Moral Exemplars

- 1. William LeMesseur. LeMesseur designed the Citicorp Building in New York. When a student identified a critical design flaw in the building during a routine class exercise, LeMesseur responded, not by shooting the messenger, but by developing an intricate and effective plan for correcting the problem before it issued in drastic real world consequences. Check out LeMesseur's profile at onlineethics and see how he turned a potential disaster into a good deed.
- 2. Fred Cuny, starting in 1969 with Biafra, carried out a series of increasingly effective interventions in international disasters. He brought effective methods to disaster relief such as engineering know-how, political savvy, good business sense, and aggressive advocacy. His timely interventions saved thousands of Kurdish refugees in the aftermath of the

Persian Gulf War in 1991. He also helped design and implement an innovative water filtration system in Sarajevo during the Bosnia-Serb conflict in 1993. For more details, consult the biographical sketch at onlineethics.

- 3. Roger Boisjoly worked on a team responsible for developing o-ring seals for fuel tanks used in the Challenger Shuttle. When his team noticed evidence of gas leaks he made an emergency presentation before officials of Morton Thiokol and NASA recommending postponing the launch scheduled for the next day. When decision makers refused to change the launch date, Boisjoly watched in horror the next day as the Challenger exploded seconds into its flight. Find out about the courageous stand Boisjoly took in the aftermath of the Challenger explosion by reading the biographical sketch at onlineethics.
- 4. Muhammad Yunus won the Nobel Prize for Peace in 2006. His effort in setting up "micro-businesses" funded through "micro-lending" has completely changed the paradigm on how to extend business practices to individuals at the bottom of the pyramid. Learn about his strategies for creating micro-businesses and how those strategies have been extended throughout the world, including Latin America, by listening to an interview with him broadcast by the Online News Hour. (See link included in this module.)
- 5. Bill Gates has often been portrayed as a villain, especially during the anti-trust suit against Mircosoft in the mid 1990's. Certainly his aggressive and often ruthless business practices need to be evaluated openly and critically. But recently Gates stopped participating in the day-to-day management of his company, Microsoft, and has set up a charitable foundation to oversee international good works projects. Click on the link included in this module to listen to and read an interview recently conducted with him and his wife, Melinda, on their charitable efforts.
- 6. Jeffrey Skilling, former CEO of Enron, can hardly be called a moral exemplar. Yet when Enron was at its peak, its CEO, Jeffrey Skilling, was considered among the most innovative, creative, and brilliant of contemporary corporate CEOs. View the documentary, The Smartest Guys in the Room, read the book of the same title, and learn about the configuration of character traits that led to Skilling's initial successes and ultimate failure. A link included in this module will lead you to an interview with Skilling conducted on March 28, 2001.
- Inez Austin worked to prevent contamination from nuclear wastes produced by a plutonium production facility. Visit Online Ethics by clicking on the

- link above to find out more about her heroic stand.
- Rachael Carson's book, The Silent Spring, was one of the key events inaugurating the environmental movement in the United States. For more on the content of her life and her own personal act of courage, visit the biographical profile at Online Ethics. You can click on the Supplimental Link provided above.

Exercise Two: Moral Exemplar Profiles

- What are the positive and negative influences you can identify for your moral exemplar?
- What good deeds did your exemplar carry out?
- What obstacles did your moral exemplar face and how did he or she overcome them?
- What skills, attitudes, beliefs, and emotions helped to orient and motivate your moral exemplar.?

Exercise Three

Prepare a short dramatization of a key moment in the life of your group's moral exemplar.

Textbox: Two different Types of Moral Exemplar

- Studies carried out by Chuck Huff into moral exemplars in computing suggest that moral exemplars can operate as craftspersons or reformers. (Sometimes they can combine both these modes.)
- Craftspersons (1) draw on pre-existing values in computing, (2) focus on users or customers who have needs, (3) take on the role of providers of a service/product, (4) view barriers as inert obstacles or puzzles to be solved, and (5) believe they are effective in their role.
- Reformers (1) attempt to change organizations and their values, (2) take on the role of moral crusaders, (3) view barriers as active opposition, and (4) believe in the necessity of systemic reform
- These descriptions of moral exemplars have been taken from a presentation by Huff at the STS colloquium at the University of Virginia on October 2006. Huff's presentation can be found at the link provided in the upper left hand corner of this module.

Elements of a Life Story Interview

- Major Influences
- Peak and Nadir Experiences
- Challenges and Opportunities.
- Goals, Values, and Objectives
- Commentary: The life story interview collects the subject's life in narrative form. Those conducting to the interview along with those studying it are skilled in identifying different patterns and structures in the interview. (Identifying and classifying the patterns is called "coding".)
- Huff, Rogerson, and Barnard interviewed moral exemplars in computing in Europe and coded for the following: "social support and antagonism, the use of technical or social expertise, the description of harm to victims or need for reform, actions taken toward reform, designs undertaken for users or clients, effectiveness and ineffectiveness of action, and negative and positive emotion" (Huff and Barnard, 2009: 50).
- They identified two kinds of moral exemplars in computing: helpers (or craftspersons) and reformers.

Helpers and Reformers

- **Craftspersons** work to preserve existing values, see themselves as providers of a service, frame problems as overcoming barriers, and seek ethical ends (Huff and Barnard, 2009: 50).
- **Reformers** focus on social systems, see themselves as moral crusaders, work to change values, view individuals as victims of injustice, and take system reform as their goal (Huff and Barnard, 2009: 50).

Exemplar- Type	Dominant Value	Project	Defining- Characteristic Emotion
Reformers	Justice	Correcting systemic Injustice	anger and contempt serve as

			motives to unseqt injustice.
Helpers or Craftspersons	Responsibility as responsiveness to relevance	Desire to alleviate suffering and solve problems	Compassion and empathy serve as motives and modes of attunement.

Reformers and HelpersThis table compares reformers to helpers or craftspersons.

What Makes a Moral Exemplar? PRIMES Explained

General Comments on Exemplars

- Moral exemplars have succeeded in integrating moral and professional attitudes and beliefs into their core identity. Going against these considerations for moral exemplars is tantamount to acting against self. Acting in accordance with them becomes second nature.
- Moral exemplars often achieve their aims with the support of "support groups." In fact, moral exemplars are often particularly adept at drawing support from surrounding individuals, groups and communities. This goes against the notion that exemplars are isolated individuals who push against the current. (Not all exemplars need fit as heroes into Ayn Rand novels.)
- Moral exemplars often do not go through periods of intensive and prolonged deliberation in order to hit upon the correct action. If we want a literary example, we need to replace the tortured deliberations of a Hamlet with the quick and intuitive insight of an Esther Summerson. (Summerson is a character in Charles Dickens' novel, Bleak House. See both William Shakespeare and Charles Dickens for more examples of villains and exemplars.) Some have situated moral exemplars within virtue ethics. They have cultivated moral habits that allow them to do good as second nature. They have also found ways to integrate moral reasoning with emotion (as motive), perception (which helps them zero in on moral relevance), and skill (which helps implement moral value). In this sense, moral expertise functions much as athletic or technical expertise; all are difficult to acquire but once acquired lead to highly skilled actions performed almost effortlessly.

PRIMES

Primes stands for Personality, Integrating value into self-system, Moral Ecology, and Moral Skills Sets. These are the elements composing moral expertise that have been identified by Huff and Rogerson based on interviews they conducted with exemplars in the areas of computing.

Personality

- Moral exemplars exhibit different configurations of personality traits based on the big five. Locate the moral exemplar you have chosen in terms of the following five continuums (or continua):
- Neuroticism to Lack of Neuroticism (Stability?)
- Agreeableness to Disagreeableness
- Extraversion to Introversion
- Openness to Closedness
- Conscientiousness to Lack of Conscientiousness
- Examine your exemplar on each of these scales. In and of themselves, these qualities are neither good nor bad. They can be integrated to form bad characters or good characters. In many cases, moral exemplars stand out through how they have put their personality characteristics to "good use." (They have used them as vehicles or channels to excellence.)

Integrating Moral Value into Self-System

- As said above, moral exemplars stand out by the way in which (and the
 extent to which) they have integrated moral value into their self-system.
 Because of this, they are strongly motivated to do good and avoid doing
 bad. Both (doing good and refraining from doing bad) express who they
 are. If they slip into bad deeds, this motivational system pushes them to
 improve to avoid repeating bad deeds.
- One way of integrating moral value into self-system is by looking at stories and narratives of those who have displayed moral excellence. Many of the individuals portrayed above (Carson, Boisjoly, LeMesseur, Cuny, Austin, and Yunus) provide concrete models of outstanding moral careers.
- Literature also provides its models of moral exemplars. Charles Dickens paints especially powerful portraits of both moral heroes (Esther Summerson and "Little Dorritt") and villains (Heep and Skimpole).
- Other vehicles for integrating moral value centrally into the self-system lie in affiliations, relationships, and friendships. Aristotle shows the importance of good friendships in developing virtues. Moral exemplars most often can point to others who have served as mentors or strong

- positive influences. For example, Roger Boisjoly tells of how he once went to a senior colleague for advice on whether to sign off on a design that was less than optimal. His colleague's advice: would you be comfortable with your wife or child using a product based on this design?
- The ethicist, Bernard Williams, has argued forcefully for the importance of personal projects in establishing and maintaining integrity. Personal projects, roles, and life tasks all convey value; when these hold positive moral value and become central unifying factors in one's character, then they also serve to integrate moral value into the self system.
- Augusto Blasi, a well known moral psychologist, gives a particularly powerful account (backed by research) of the integration of moral value into self-system and its motivational effect.

Moral Ecology

- Moral Ecologies: "The term moral ecology encourages us to consider the complex web of relationships and influences, the long persistence of some factors and the rapid evolution of others, the variations in strength and composition over time, the micro-ecologies that can exist within larger ones, and the multidirectional nature of causality in an ecology." From Huff et. al.
- Moral ecologies refer to social surrounds, that is, the different groups, organizations, and societies that surround us and to which we are continually responding.
- We interact with these social surrounds as organisms interact with their surrounding ecosystems. In fact, moral ecologies offer us roles (like ecological niches) and envelop us in complex organizational systems (the way ecosystems are composed of interacting and interrelated parts). We inhabit and act within several moral ecologies; these moral ecologies, themselves, interact. Finally, moral ecologies, like natural ecosystems, seek internal and external harmony and balance. Internally, it is important to coordinate different the constituent individuals and the roles they play. Externally, it is difficult but equally important to coordinate and balance the conflicting aims and activities of different moral ecologies.
- Moral ecologies shape who we are and what we do. This is not to say that they determine us. But they do channel and constrain us. For example, your parents have not determined who you are. But much of what you do responds to how you have experienced them; you agree with them, refuse to question their authority, disagree with them, and rebel against them. The

- range of possible responses is considerable but these are all shaped by what you experienced from your parents in the past.
- The moral ecologies module (see the link provided above) describes three different moral ecologies that are important in business: quality-, customer-, and finance-driven companies. (More "kinds" could be generated by combining these in different ways: for example, one could characterize a company as customer-driven but transforming into a quality-driven company.) Roles, strategies for dissent, assessment of blame and praise, and other modes of conduct are shaped and constrained by the overall character of the moral ecology.
- Moral ecologies, like selves, can also be characterized in terms of the "centrality" of moral value. Some support the expression of moral value or certain kinds of moral value (like loyalty) while undermining or suppressing the expression of others (like courage or autonomy).
- Finally, think in terms of how personality traits integrated around moral value interact with different types of moral ecology. If a moral ecology undermines virtuous conduct, what strategies are available for changing it? Or resisting it? If there are different kinds of moral exemplar, which pair best with which moral ecology? (How would a helper or craftsperson prevail in a finance-driven moral ecology like those characterized by Robert Jackall in **Moral Mazes**?

Moral Skills Sets

- Moral expertise is not reducible to knowing what constitutes good conduct and doing your best to bring it about. Realizing good conduct, being an effective moral agent, bringing value into the work, all require skills in addition to a "good will." PRIMES studies have uncovered four skill sets that play a decisive role in the exercise of moral expertise.
- **Moral Imagination**: The ability to project into the standpoint of others and view the situation at hand through their lenses. Moral imagination achieves a balance between becoming lost in the perspectives of others and failing to leave one's own perspective. Adam Smith terms this balance "proportionality" which we can achieve in empathy when we feel with them but do not become lost in their feelings. Empathy consists of feeling with others but limiting the intensity of that feeling to what is proper and proportionate for moral judgment.
- **Moral Creativity**: Moral Creativity is close to moral imagination and, in fact, overlaps with it. But it centers in the ability to frame a situation in different ways. Patricia Werhane draws attention to a lack of moral

creativity in the Ford Pinto case. Key Ford directors framed the problem with the gas tank from an economical perspective. Had they considered other framings they might have appreciated the callousness of refusing to recall Pintos because the costs of doing so (and retrofitting the gas tanks) were greater than the benefits (saving lives). They did not see the tragic implications of their comparison because they only looked at the economic aspects. Multiple framings open up new perspectives that make possible the design of non-obvious solutions.

- **Reasonableness**: Reasonableness balances openness to the views of others (one listens and impartially weighs their arguments and evidence) with commitment to moral values and other important goals. One is open but not to the extent of believing anything and failing to keep fundamental commitments. The Ethics of Team Work module (see link above) discusses strategies for reaching consensus that are employed by those with the skill set of reasonableness. These help avoid the pitfalls of group-based deliberation and action.
- **Perseverance**: Finally, perseverance is the "ability to plan moral action and continue on that course by responding to circumstances and obstacles while keeping ethical goals intact." Huff et. al.

Exercise: Two Portrayals of More and Cromwell

Watch the movie, **A Man for All Seasons**, which won the Oscar award for best picture in 1967. Robert Bolt, who wrote both the play the movie was based on and much of the screen play sets out to portray More as a "hero of selfhood" (Preface to A Man for All Seasons, Xii). As Bolt puts it: "**Thomas More, as I wrote about him, became for me a man with an adamantine sense of own self. He knew where he began and left off, what area of himself he could yield to the encroachments of his enemies, and what to the encroachments of those he loved. {B]ut at length he was asked to retreat from that final area where he located his self. And there this supple, humorous, unassuming and sophisticated person set like metal, was overtaken by an absolutely primitive rigor, and could no more be budged than a cliff."**

Bolt's characterization of More follows closely the model of authenticity set forth by the existentialists, especially Camus, as he states in the Preface to his play. Here the human defines himself or herself through commitments undertaken. These projects are incorporated into the self-system to form the core of one's personality. Then integrity becomes the core value for the hero of

selfhood. Integrity is spelled out in terms of how one is able to resist external forces, challenges, and temptations to act against one's core beliefs and to break up the coherence of these self-defining beliefs. More's challenge came in the form of an oath which required that he swear against his core beliefs and that he offer his own self as the guarantee of the truth of this oath. Bolt goes to great lengths not to portray More as a religious fanatic. More is portrayed as open, inquiring, questioning, and flexible in all areas except that core in terms of which he has defined his own self. To go against this core would be to lose his very identity.

Thomas Cromwell is More's opponent in both Bolt's play, A Man for All Seasons and in Hilary Mantel's recent novels, Wolf Hall and Bring Out the Bodies. But here is where the resemblance ends. In Bolt's play, Cromwell is immoral and Machiavellian. He takes his ends as already given; he accepts them as actionable and even moral without examination and without question. Cromwell, in Bolt's play, restricts himself to figuring out the most effective and direct means to the ends handed down to him by his king (Henry VIII). Cromwell does not worry that his private conscience may be contrary to his public duties. But More does, at least in Bolt's account. In response to another "administrator," Cardinal Wolsey, More says the following: "Well...I believe, when statesmen forsake their own private conscience for the sake of their public duties...they lead their country by a short route to chaos" (MFAS 13). One can get lost in the meandering of means and policies if one does not remain fixed and focused on moral ends.

Mantel's recent novels reverse the relations between More and Cromwell. She writes explicitly and sympathetically from Cromwell's viewpoint adopting a style carefully crafted to transport the reader directly into Cromwell's perspective; the reader literally sees things through Cromwell's eyes. Cromwell is portrayed as a humanist who is plagued by the problem of "dirty hands." This is the supposedly realistic perception that in order to do good one must, in the complicated and imperfect world, do harm. The Machiavellian calculation may be necessary if those intending good are to do good in this imperfect world. Cromwell is aid and advisor to Henry VIII who is, in many ways, a tyrant. Cromwell works to do Henry's will but also to blunt the force of its harmful consequences on others, especially the "common human." (This is the ordinary human who, up to this point, has been left out of the scope of moral consideration.) So Mantel portrays Cromwell as good but also as human and less than perfect; he does his best in a difficult and imperfect world.

Cromwell has not become Mantel's flawed moral exemplar because he softens Henry's harsh policies. On the other hand, Thomas More, Bolt's hero, becomes a religious fanatic under Mantel's pen who refers to opponents in harsh, scatological language and who also tortures those whose religious views differ from his.

There are obviously different interpretations of history at play in the different portrayals of Bolt and Mantel. But more importantly, both seem to have different views of what is morally exemplary. Bolt's More defines himself in terms of core beliefs and commitments and then remains true to these even in the face of overwhelming external challenge. His claim to being a moral exemplar is based on his commitments and his giving up his life to remain true to these. Mantel's Cromwell is a bit more complicated. He is less committed to principle and more to compromise, to integrating differing and contending individuals and their positions, and to making the world a better place by gradually humanizing government and business.

	Hilary MantelWolf Hall	Robert BoltA Man for All Seasons
Thomas More	Mantel portrays More as a religious fanatic. His refusal to respect those who disagree with him and his use of torture to convert them to his own religious views betray, for Mantel, his own unacknowledged selfdoubts.	Bolt portrays More as a saint of selfhood. More's religious beliefs penetrate to his core self and arise out of a constellation of values, principles, and commitments that define his identity. More holds strongly to these identity-conferring beliefs and keeps them in-tact even in the face of extreme pressure to deny them.
Thomas	Mantel provides an	Bolt sees Cromwell as

Cromwell

unflinching yet
humanistic portrayal of
Cromwell. In order to do
good in a corrupt
political environment,
Cromwell makes
considerable concessions
to expediency. But his
overall aim is to
humanize England
through the personal
influence he exercises on
its king and through the
civilizing influence of
international business.

Machiavellian. We see
Cromwell through More's
eyes as one who will
sacrifice basic religious and
moral truths for short-term
political gain. Cromwell
will undertake a course of
action with double effects if
the good consequences
outweigh the bad. However,
once Cromwell sacrifices
principle and commitment,
he loses his moral compass
and sense of identity.

Collision of Different Types of Moral ExemplarThis table shows how Robert Bolt and Hilary Mantel provide radically different accounts of the conflict of More and Cromwell. For Mantel, Cromwell is a moral exemplar and More a religious fanatic. For Bolt, More is a saint of self-hood while Cromwell is a Machiavellian villain.

Presentation on Moral Exemplars

https://cnx.org/content/m60084/

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Insert paragraph text here.

Moral Exemplars in Business and Professional Ethics
This module has been designed to build the foundation for a practical approach to virtue ethics. Student are provided with the names of several moral exemplars in business and professional ethics. They are then asked to identify the traits, attitudes, emotions, and skills that make these individuals moral exemplars. Textboxes acquaint students with moral exemplar studies that have been carried out. The links included in this module help students identify online and offline sources that describe moral exemplars and outline moral exemplar studies. This module is being developed as a part of an NSF-funded project, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF SES 0551779.

Module Introduction

Through the activities of this module you will learn to balance cautionary tales in business and professional ethics with new stories about those who consistently act in a morally exemplary way. While cautionary tales teach us what to avoid, narratives from the lives of moral exemplars show us how to be good. A study of moral best practices in business and professional ethics shows that moral exemplars exhibit positive and learnable skills. This module, then, looks at moral exemplars in business and the professions, outlines their outstanding accomplishments, and helps you to unpack the strategies they use to overcome obstacles to doing good.

You will begin by identifying outstanding individuals in business and associated practices who have developed moral "best practices." Your task is look at these individuals, retell their stories, identify the skills that help them do good, and build a foundation for a more comprehensive study of virtue in occupational and professional ethics.

Moral Exemplar Terms

Moral Exemplar

 An individual who demonstrates outstanding moral conduct often in the face of difficult or demanding circumstances. (Beyond the "call of duty" Your first item here

- Often moral exemplars perform actions that go beyond what is minimal, required, ordinary, or even extra-ordinary.
- Moral exemplars perform actions that are "above and beyond the call of duty."
- Most important, they perform these actions repeatedly across a career or even a lifetime. In some way, their exemplary conduct has become "second nature."

Supererogatory

- "A supererogatory act is an act that is beyond the call of duty. It is something that is morally good to do but not obligatory. Examples of supererogatory acts are donating blood, volunteering on a rape crisis hotline, babysitting (without accepting recompense) a friend's two-year old triplets for the afternoon, or throwing oneself on a live hand grenade in order to save one's buddies' lives." (Baron, 1997: 614)
- Baron's definition (found in the Encyclopedia of Business Ethics) captures how the supererogatory occupies a moral space well above that of the minimally decent or even the ordinary. Your second item here. Supererogatory actions are outstanding, extra-ordinary, and exemplary in both moral and practical senses.
- Urmsom, a moral philosopher, remarks how the supererogatory has been neglected (up to the mid-twentieth century) by moral philosophy, dominated as it was in the previous century by the debate between Utilitarianism and Deontology.
- Two quotations from Urmson show this clearly: (1)"But it does seem that these facts have been neglected in their general, systematic accounts of morality. It is indeed easy to see that on some of the best-known theories there is no room for such facts" (Urmson, 1958, p. 206). (2)"[s]imple utilitarianism, Kantianism, and intuitionism, then, have no obvious theoretical niche for the saint and the hero" (Urmson, 1958: 207).
- Baron, M. (1997). "Supererogation", Blackwell Encyclopedic Dictionary of Business Ethics, Patricia H. Werhane and R. Edward Freeman, eds., New York: Blackwell: 614-7.

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Moral Minimum

- Compare and distinguish the idea of the supererogatory with that of the moral minimum.
- The difference is between that which is morally exemplary versus that which is just over the threshold of wrongdoing.
- "I suggest that moral minimums are best understood as negative standards, universally agreed upon "bottom lines" beyond which it is morally questionable to act. For example, it is almost always wrong to deliberately harm or contribute to harming another person or persons; to deliberately violate their rights to freedom, life, or property; to treat individuals or classes of individuals with disrespect; to compete or cooperate unfairly; not to honor promises or contract; or to be dishonest or deceitful. Whereas these moral minimums do not define goodness, fairness, or benefit, or define the positive content of rights, they set minimum guidelines for behavior that most people everywhere might agree on...." (Werhane, 1999: 122).
- Werhane, P. (1999). Moral Imagination and Management Decision-Making, Oxford, UK: Oxford University Press.

Moral Exemplar Criteria in Computing

- 1. Either a sustained commitment to moral ideals or ethical principles in computing that include a generalized respect for humanity or sustained evidence of moral virtue in the practice of computing.
- 2. A disposition to make computing decisions in accord with one's moral ideals or ethical principles, implying a consistency between one's actions and intentions and between the means and ends of one's actions
- 3. A willingness to risk one's self interest for the sake of one's moral values.
- 4. A tendency to be inspiring to other computer professional and thereby to move them to moral action

- 5. A sense of realistic humility about one's own importance relative to the world at large, implying a relative lack of concern for one's own ego.
- 6. Huff, C. and Barnard, L. (2009). "Good Computing: Moral Exemplars in the Computing Profession", IEEE Technology and Society Magazine: 47-54.

Responders and Idealists

- This quotation from Blum provides a nice characterization of "moral responders."
- "the 'responder' moral exemplar does not, prior to confronting situations in which she manifests moral excellence, possess a set of moral principles which she has worked out explicitly, committed herself to, and attempted to guide her life by."
- "the responder responds to the situations she faces and to individuals in a 'morally excellent way."".
- Blum, L. (1994). "Moral Exemplars: reflections on Schindler, the Trochmés, and others", Moral Perception and Particularity, Cambridge, Mass.: Cambridge University Press: 65-97.

Idealists

- According to Blum (and Hailie), Magda Trochme is a responder while her husband, Andre Trochme is an idealist. Both perform morally exemplary and supererogatory actions but out of different motivations.
- "To be an idealist [one] must see these ideals as more than merely personal goals or a personal conception of the good. They must be formulated as general values, and regarded by the agent as having some kind of intrinsic worth or general validity.
- Blum, L. (1994). "Moral Exemplars: reflections on Schindler, the Trochmés, and others", Moral Perception and Particularity, Cambridge, Mass.: Cambridge University Press: 65-97.

Moral Heroes and Moral Saints

• Moral heroes achieve their good and excellent goals only by making substantial sacrifices. The notion of self-sacrifice is the key

- distinguishing characteristic of this kind of exemplar.
- What distinguishes moral saints from other kinds of moral exemplar is the criterion of moral faultlessness; these exemplars achieve their excellences by means of conduct that is free from any moral flaw.
- Moral saints are often used to argue for the unity of virtues thesis, namely, that the virtues work together forming a system where each is necessary and mutually supports the others.

	Moral Heroes	Moral Saints
Idealists	MLK and Andre Trochme	Thomas More
Responders	Magda Trochme and Oscar Schindler	Mother Teresa and Saint Francis

Table of Moral Exemplars Table of Moral Exemplars

Exercise 1: Choose a moral exemplar

- Identify a moral exemplar and provide a narrative description of his or her life story.
- To get this process started, look at the list of moral exemplars provided in this module. The links in the upper left hand corner of this module will help you to explore their accomplishments in detail. Feel free to choose your own exemplar. Make sure you identify someone in the occupational and professional areas such as business and engineering. These areas have more than their share of exemplars, but they tend to escape publicity because their actions avoid publicity generating disasters rather than bring them about.

Moral Exemplars

- 1. William LeMesseur. LeMesseur designed the Citicorp Building in New York. When a student identified a critical design flaw in the building during a routine class exercise, LeMesseur responded, not by shooting the messenger, but by developing an intricate and effective plan for correcting the problem before it issued in drastic real world consequences. Check out LeMesseur's profile at onlineethics and see how he turned a potential disaster into a good deed.
- 2. Fred Cuny, starting in 1969 with Biafra, carried out a series of increasingly effective interventions in international disasters. He brought effective methods to disaster relief such as engineering knowhow, political savvy, good business sense, and aggressive advocacy. His timely interventions saved thousands of Kurdish refugees in the aftermath of the Persian Gulf War in 1991. He also helped design and implement an innovative water filtration system in Sarajevo during the Bosnia-Serb conflict in 1993. For more details, consult the biographical sketch at onlineethics.
- 3. Roger Boisjoly worked on a team responsible for developing o-ring seals for fuel tanks used in the Challenger Shuttle. When his team noticed evidence of gas leaks he made an emergency presentation before officials of Morton Thiokol and NASA recommending postponing the launch scheduled for the next day. When decision makers refused to change the launch date, Boisjoly watched in horror the next day as the Challenger exploded seconds into its flight. Find out about the courageous stand Boisjoly took in the aftermath of the Challenger explosion by reading the biographical sketch at onlineethics.
- 4. Muhammad Yunus won the Nobel Prize for Peace in 2006. His effort in setting up "micro-businesses" funded through "micro-lending" has completely changed the paradigm on how to extend business practices to individuals at the bottom of the pyramid. Learn about his strategies for creating micro-businesses and how those strategies have been extended throughout the world, including Latin America, by listening to an interview with him broadcast by the Online News Hour. (See link included in this module.)

- 5. Bill Gates has often been portrayed as a villain, especially during the anti-trust suit against Mircosoft in the mid 1990's. Certainly his aggressive and often ruthless business practices need to be evaluated openly and critically. But recently Gates stopped participating in the day-to-day management of his company, Microsoft, and has set up a charitable foundation to oversee international good works projects. Click on the link included in this module to listen to and read an interview recently conducted with him and his wife, Melinda, on their charitable efforts.
- 6. Jeffrey Skilling, former CEO of Enron, can hardly be called a moral exemplar. Yet when Enron was at its peak, its CEO, Jeffrey Skilling, was considered among the most innovative, creative, and brilliant of contemporary corporate CEOs. View the documentary, The Smartest Guys in the Room, read the book of the same title, and learn about the configuration of character traits that led to Skilling's initial successes and ultimate failure. A link included in this module will lead you to an interview with Skilling conducted on March 28, 2001.
- Inez Austin worked to prevent contamination from nuclear wastes produced by a plutonium production facility. Visit Online Ethics by clicking on the link above to find out more about her heroic stand.
- Rachael Carson's book, The Silent Spring, was one of the key events inaugurating the environmental movement in the United States. For more on the content of her life and her own personal act of courage, visit the biographical profile at Online Ethics. You can click on the Supplimental Link provided above.

Exercise Two: Moral Exemplar Profiles

- What are the positive and negative influences you can identify for your moral exemplar?
- What good deeds did your exemplar carry out?
- What obstacles did your moral exemplar face and how did he or she overcome them?
- What skills, attitudes, beliefs, and emotions helped to orient and motivate your moral exemplar.?

Exercise Three

Prepare a short dramatization of a key moment in the life of your group's moral exemplar.

Textbox: Two different Types of Moral Exemplar

- Studies carried out by Chuck Huff into moral exemplars in computing suggest that moral exemplars can operate as craftspersons or reformers. (Sometimes they can combine both these modes.)
- Craftspersons (1) draw on pre-existing values in computing, (2) focus on users or customers who have needs, (3) take on the role of providers of a service/product, (4) view barriers as inert obstacles or puzzles to be solved, and (5) believe they are effective in their role.
- Reformers (1) attempt to change organizations and their values, (2) take on the role of moral crusaders, (3) view barriers as active opposition, and (4) believe in the necessity of systemic reform
- These descriptions of moral exemplars have been taken from a presentation by Huff at the STS colloquium at the University of Virginia on October 2006. Huff's presentation can be found at the link provided in the upper left hand corner of this module.

Elements of a Life Story Interview

- Major Influences
- Peak and Nadir Experiences
- Challenges and Opportunities.
- Goals, Values, and Objectives
- Commentary: The life story interview collects the subject's life in narrative form. Those conducting to the interview along with those studying it are skilled in identifying different patterns and structures in the interview. (Identifying and classifying the patterns is called "coding".)
- Huff, Rogerson, and Barnard interviewed moral exemplars in computing in Europe and coded for the following: "social support and antagonism, the use of technical or social expertise, the description of harm to victims or need for reform, actions taken toward reform,

- designs undertaken for users or clients, effectiveness and ineffectiveness of action, and negative and positive emotion" (Huff and Barnard, 2009: 50).
- They identified two kinds of moral exemplars in computing: helpers (or craftspersons) and reformers.

Helpers and Reformers

- **Craftspersons** work to preserve existing values, see themselves as providers of a service, frame problems as overcoming barriers, and seek ethical ends (Huff and Barnard, 2009: 50).
- **Reformers** focus on social systems, see themselves as moral crusaders, work to change values, view individuals as victims of injustice, and take system reform as their goal (Huff and Barnard, 2009: 50).

What Makes a Moral Exemplar? PRIMES Explained

General Comments on Exemplars

- Moral exemplars have succeeded in integrating moral and professional attitudes and beliefs into their core identity. Going against these considerations for moral exemplars is tantamount to acting against self. Acting in accordance with them becomes second nature.
- Moral exemplars often achieve their aims with the support of "support groups." In fact, moral exemplars are often particularly adept at drawing support from surrounding individuals, groups and communities. This goes against the notion that exemplars are isolated individuals who push against the current. (Not all exemplars need fit as heroes into Ayn Rand novels.)
- Moral exemplars often do not go through periods of intensive and prolonged deliberation in order to hit upon the correct action. If we want a literary example, we need to replace the tortured deliberations of a Hamlet with the quick and intuitive insight of an Esther Summerson. (Summerson is a character in Charles Dickens' novel, Bleak House. See both William Shakespeare and Charles Dickens for more examples of villains and exemplars.) Some have situated moral

exemplars within virtue ethics. They have cultivated moral habits that allow them to do good as second nature. They have also found ways to integrate moral reasoning with emotion (as motive), perception (which helps them zero in on moral relevance), and skill (which helps implement moral value). In this sense, moral expertise functions much as athletic or technical expertise; all are difficult to acquire but once acquired lead to highly skilled actions performed almost effortlessly.

PRIMES

Primes stands for Personality, Integrating value into self-system, Moral Ecology, and Moral Skills Sets. These are the elements composing moral expertise that have been identified by Huff and Rogerson based on interviews they conducted with exemplars in the areas of computing.

Personality

- Moral exemplars exhibit different configurations of personality traits based on the big five. Locate the moral exemplar you have chosen in terms of the following five continuums (or continua):
- Neuroticism to Lack of Neuroticism (Stability?)
- Agreeableness to Disagreeableness
- Extraversion to Introversion
- Openness to Closedness
- Conscientiousness to Lack of Conscientiousness
- Examine your exemplar on each of these scales. In and of themselves, these qualities are neither good nor bad. They can be integrated to form bad characters or good characters. In many cases, moral exemplars stand out through how they have put their personality characteristics to "good use." (They have used them as vehicles or channels to excellence.)

Integrating Moral Value into Self-System

 As said above, moral exemplars stand out by the way in which (and the extent to which) they have integrated moral value into their selfsystem. Because of this, they are strongly motivated to do good and avoid doing bad. Both (doing good and refraining from doing bad) express who they are. If they slip into bad deeds, this motivational system pushes them to improve to avoid repeating bad deeds.

- One way of integrating moral value into self-system is by looking at stories and narratives of those who have displayed moral excellence. Many of the individuals portrayed above (Carson, Boisjoly, LeMesseur, Cuny, Austin, and Yunus) provide concrete models of outstanding moral careers.
- Literature also provides its models of moral exemplars. Charles Dickens paints especially powerful portraits of both moral heroes (Esther Summerson and "Little Dorritt") and villains (Heep and Skimpole).
- Other vehicles for integrating moral value centrally into the self-system lie in affiliations, relationships, and friendships. Aristotle shows the importance of good friendships in developing virtues. Moral exemplars most often can point to others who have served as mentors or strong positive influences. For example, Roger Boisjoly tells of how he once went to a senior colleague for advice on whether to sign off on a design that was less than optimal. His colleague's advice: would you be comfortable with your wife or child using a product based on this design?
- The ethicist, Bernard Williams, has argued forcefully for the importance of personal projects in establishing and maintaining integrity. Personal projects, roles, and life tasks all convey value; when these hold positive moral value and become central unifying factors in one's character, then they also serve to integrate moral value into the self system.
- Augusto Blasi, a well known moral psychologist, gives a particularly powerful account (backed by research) of the integration of moral value into self-system and its motivational effect.

Moral Ecology

 Moral Ecologies: "The term moral ecology encourages us to consider the complex web of relationships and influences, the long persistence of some factors and the rapid evolution of others, the variations in strength and composition over time, the micro-ecologies that can exist within larger ones, and the multidirectional nature of causality in an ecology." From Huff et. al.

- Moral ecologies refer to social surrounds, that is, the different groups, organizations, and societies that surround us and to which we are continually responding.
- We interact with these social surrounds as organisms interact with their surrounding ecosystems. In fact, moral ecologies offer us roles (like ecological niches) and envelop us in complex organizational systems (the way ecosystems are composed of interacting and interrelated parts). We inhabit and act within several moral ecologies; these moral ecologies, themselves, interact. Finally, moral ecologies, like natural ecosystems, seek internal and external harmony and balance. Internally, it is important to coordinate different the constituent individuals and the roles they play. Externally, it is difficult but equally important to coordinate and balance the conflicting aims and activities of different moral ecologies.
- Moral ecologies shape who we are and what we do. This is not to say
 that they determine us. But they do channel and constrain us. For
 example, your parents have not determined who you are. But much of
 what you do responds to how you have experienced them; you agree
 with them, refuse to question their authority, disagree with them, and
 rebel against them. The range of possible responses is considerable but
 these are all shaped by what you experienced from your parents in the
 past.
- The moral ecologies module (see the link provided above) describes three different moral ecologies that are important in business: quality-, customer-, and finance-driven companies. (More "kinds" could be generated by combining these in different ways: for example, one could characterize a company as customer-driven but transforming into a quality-driven company.) Roles, strategies for dissent, assessment of blame and praise, and other modes of conduct are shaped and constrained by the overall character of the moral ecology.
- Moral ecologies, like selves, can also be characterized in terms of the "centrality" of moral value. Some support the expression of moral value or certain kinds of moral value (like loyalty) while undermining or suppressing the expression of others (like courage or autonomy).
- Finally, think in terms of how personality traits integrated around moral value interact with different types of moral ecology. If a moral ecology undermines virtuous conduct, what strategies are available for

changing it? Or resisting it? If there are different kinds of moral exemplar, which pair best with which moral ecology? (How would a helper or craftsperson prevail in a finance-driven moral ecology like those characterized by Robert Jackall in **Moral Mazes**?

Moral Skills Sets

- Moral expertise is not reducible to knowing what constitutes good conduct and doing your best to bring it about. Realizing good conduct, being an effective moral agent, bringing value into the work, all require skills in addition to a "good will." PRIMES studies have uncovered four skill sets that play a decisive role in the exercise of moral expertise.
- **Moral Imagination**: The ability to project into the standpoint of others and view the situation at hand through their lenses. Moral imagination achieves a balance between becoming lost in the perspectives of others and failing to leave one's own perspective. Adam Smith terms this balance "proportionality" which we can achieve in empathy when we feel with them but do not become lost in their feelings. Empathy consists of feeling with others but limiting the intensity of that feeling to what is proper and proportionate for moral judgment.
- Moral Creativity: Moral Creativity is close to moral imagination and, in fact, overlaps with it. But it centers in the ability to frame a situation in different ways. Patricia Werhane draws attention to a lack of moral creativity in the Ford Pinto case. Key Ford directors framed the problem with the gas tank from an economical perspective. Had they considered other framings they might have appreciated the callousness of refusing to recall Pintos because the costs of doing so (and retrofitting the gas tanks) were greater than the benefits (saving lives). They did not see the tragic implications of their comparison because they only looked at the economic aspects. Multiple framings open up new perspectives that make possible the design of non-obvious solutions.
- **Reasonableness**: Reasonableness balances openness to the views of others (one listens and impartially weighs their arguments and evidence) with commitment to moral values and other important goals.

One is open but not to the extent of believing anything and failing to keep fundamental commitments. The Ethics of Team Work module (see link above) discusses strategies for reaching consensus that are employed by those with the skill set of reasonableness. These help avoid the pitfalls of group-based deliberation and action.

• **Perseverance**: Finally, perseverance is the "ability to plan moral action and continue on that course by responding to circumstances and obstacles while keeping ethical goals intact." Huff et. al.

Presentation on Moral Exemplars

https://cnx.org/content/m14256/

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Different Approaches to Corporate Governance

This module, which is still undergoing revision, presents different approaches to corporate governance. To provide a realistic context in which to practice these approaches and the associated concepts, it has students in small groups choose an actual company and develop compliance and corrective plans using the approaches and concepts of corporate governance. Designed to compliment previously published modules on the history of corporations, moral ecologies, and corporate social responsibility, it summarizes material currently being taught at the University of Puerto Rico at Mayaguez in the courses of "Corporate Leadership and Social Responsibility" and "Business, Society, and Government." This module has been developed through a project funded by the National Science Foundation, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF-SES-0551779.

- -The first link refers to a news story on Dunn's resignation from the Hewlett-Packard board.
- It is taken from PBS's Online NewsHour in a report delivered by Margaret Warner on September 22, 2006.
- -The second link provides background information on the Hughes Aircraft case profiled just below.

Ν		

Arthur Andersen

Once a highly respected company, Arthur Andersen no longer exists having gone bankrupt in the wake of the Enron disaster. Arthur Andersen provided Enron with consulting and accounting services. The consulting division was more successful but the accounting division, with its long tradition of outstanding ethical service, was the corporation's backbone. Arthur Andersen signed off on Enron's use of mark-to-market accounting which allowed Enron to project optimistic earnings from their deals and then report these as actual profits years before they would materialize (if at all). They also signed off on Enron's deceptive use of special purpose entities (SPE) to hide debt by shifting it from one fictional company to another. With Arthur Andersen's blessing, Enron created the illusion of a profitable company to keep stock value high. When investors finally saw through the illusion, stock prices plummeted. To hide their complicity, Arthur Andersen shredded incriminating documents. For federal prosecutors this was the last straw. The Justice Department indicted the once proud accounting firm convinced that this and previous ethical lapses (Sunbeam and Waste Management) showed a pattern of unabated wrongdoing. Arthur Andersen was conficted of obstructing justice on June 15, 2002 and closed its doors shortly after.

McLean and Elkind provided background for this profile on Arthur Andersen. See below for complete reference. **AA Timeline (Taken from Smartest Guys in the Room)**

- 1913--Founded by Arthur Andersen: "think straight, talk straight"
- Stood up to Railroad company in early years. When asked to change accounting standards, Andersen said, "There is not enough money in the city of Chicago [to make AA give into client demands]"
- 1947-1963--Leonard Spacek became president of AA succeeding Arthur Andersen.
- Spacek helped motivate the formation of the Financial Accounting Standards Board. AA also served as conscience of accounting profession criticizing the profession and the SEC (Securities and Exchange Commission) for "failing to square its so-called principles with its professional responsibility to the public."
- 1963-1989--Slow erosion of standards and development of competition between accounting and consulting divisions. (Consulting division was developed to take advantage of a profitable direction in the financial induistry.)
- 1989--Consultants achieve relative autonomy as "separate business unit." (McLean: 144)
- 1997--Consultants break from firm.
- 1988-1991--Arthur Andersen receives 54 million in fees from Enron
- 2000--Enron pays AA 52 million. The lion share of this was for consulting fees.

• June 15, 2002--AA found guilty of obstruction of justice. "Today's verdict is wrong....The reality here is that this verdict represents only a technical confiction." (McLean: 406)

Hughes Aircraft

Howard Hughes founded this company at the beginning of the twentieth century. Hughes became a regular supplier of military hardware to the U.S. military. In the 1980's this included parts for surface to air misiles and fighter aircraft. One division specialized in computer chips designed to convert analogue information to digital for use in guidance systems and decision support systems. For example, these chips interacted with radar to help pilots of fighter aircraft avoid enemy missiles and also served as an essential component for missile guidance systems, the so-called smart bombs. Hughes had won the competitive bids for these highly profitable military projects but they had also committed themselves to tight delivery schedules with inflexible deadlines. And on top of this, the U.S. Airforce demanded that these computer chips and the systems that integrated them be rigorously tested to show that they could withstand the severe environmental stresses of battle. Hughes soon fell behind on the delivery of these computer chips causing a chain reaction of other delays both within the company and between the company and other links in the military supply chain. The environmental tests carried out by quality control under the supervision of Frank Saia had worked hard to complete the time-consuming tests and still remain on schedule with deliveries; hot parts (parts in high demand) were pulled to the front of the testing line to keep things running but soon even this wasn't enough to prevent delays and customer complaints. Giving way to these pressures, some Hughes supervisors pushed employees to pass chips without testing and even to pass chips that had failed tests. Margaret Gooderal and Ruth Ibarra resigned from the company and blew the whistle on these and other ethical failings that had become rampant in Hughes. So the corporate social responsibility question becomes how to change this culture of dishonesty and restore corporate integrity to this once innovative and leading company. (Background information on Hughes can be found at computingcases.org.)

Patricia Dunn v. Tom Perkins on Corporate Governance

When Patricia Dunn became a "non-executive" chairman of Hewlett-Packard's board on February 7, 2005, she brought with her an outstanding reputation in corporate governance. Her top priorities were to oversee the election of a new CEO after the firing of Carly Fiorina whose management of the recent acquisition of Compaq had lost her the HP board's support. Dunn also was determined to stop leaks to the press from high-level HP officials. She viewed the latter task as a fundament component of the post-Enron corporate governance approach she felt was needed as Hewlett-Packard moved into the 21st century. But her formal take on CG was at odds with powerful board member and successful venture capitalist, Tom Perkins. In his opinion, too strict an approach to CG stood in the way of HP culture and took focus away from competing with Dell and IBM as well as staying on the cutting edge in the development of new technology. As the leaks continued, Dunn's investigation into their source (most likely a discontented HP board member) became more active and rigorous. And the disagreements between her and board member Perkins deepened; their incompatible views on CG (and other disagreements) led to Perkins's resignation from the HP board. Things became critical when Perkins received a letter from A.T. and T. informing him that an account had been established in his name (but without his knowledge or consent) using the last 4 digits of his social security number and his private phone number. During the HP-led investigation into the press leaks, a private investigation firm used an illegal technique known as "pretexting" to obtain confidential information about HP board members and news reporters including private phone and social security numbers. Perkins reported this to the SEC, and Patricia Dunn, as chairman and de facto head of the leak investigation, was indicted on four criminal charges including identity theft.

For a complete case study see Stewart (complete reference below) and Anne Lawrence and James Weber, Business and Society: Stakeholders, Ethics, Public Policy, 13th edition (McGraw-Hill): 501-513.

Dunn focused on incompatible views of corporate governance as one of the causes of the rift that had developed between her and Perkins's: "Tom's model of governance may be appropriate in the world of venture capital, but it is outmoded and inappropriate in the world of public company governance." (Stewart, 165) She also made clear her strong views on board members leaking confidential information shared during board meetings to the press: "The most fundamental duties of a director--the duties of deliberation and candor--rely entirely upon the absolute trust that each director must have in one another's confidentiality. This is true for trivial as well as immportant matters, because even trivial information that finds its way from the boardroom to the press corrodes trust among directors. It is even more critical when discussions can affect stock

prices....Leaking "good" information is as unacceptable as leaking "bad" information--no one can foretell how such information may advantage or disadvantage one investor relative to another." (Stewart, 156)

Questions

How can successful corporate governance programs be integrated into companies with free-wheeling, innovative cultures without dampening creative and imaginative initiatives? How does one make sense of the fundamental irony of this case, that a conscientious pursuit of corporate governance (attacking violations of board confidentiality) can turn into violation of corporate governance (violation of the privacy and persons of innocent board members)?

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Introduction

James B. Stewart, in a **New Yorker** article about Patricia Dunn and Hewlett-Packard, describes corporate governance as "a term that technically refers to all aspects of running a corporation but in recent years has come to emphasize issues of fairness, transparency, and accountability." This module looks at corporate governance from the macro perspective, (1) examining the management strategies adopted by a firm to ensure compliance and pursue excellence and (2) from the standpoint of government as it seeks to minimize unethical corporate behavior and to maximize the corporation's contribution to social welfare.

What you need to know ...

Prisoner's Dilemma: Cooperation or Competition?

Scholarly debates on corporate governance have turned on the advocacy of different approaches, many of which can be modeled mathematically. Two approaches are based on the concepts of agency and stewardship. (See Davis et. al. in Clarke 2004) To enter into this debate, you will reenact the "Prisoner's Dilemma." Imagine that two patriotic spies, A and B, have just been captured by the enemy. Both are placed in separate interrogation cells and are being pressured to confess and provide details about their spying activities. A and B would like to coordinate their actions but the enemy has kept them apart to prevent this. Their objective is to pit A against B another in order to get the desired information. To do this, they have set forth the following systems of motivations, i.e., punishments and rewards.

Options for the Prisoners

- **If both A and B confess**. A and B are put in jail for five years each. The net loss in this scenario is 10. This is the least desirable alternative from the collective standpoint.
- **If one confesses and the other does not**. The confessor is released immediately while the non-confessor gets seven years in prison. This maximizes the confessor's self interest but severally punishes the patriotic, non-confessor. Net loss is 7.
- **If both do not confess**. After six months of half-hearted interrogation (most of this time is for processing the prisoners' release), both are set free for lack of evidence. While not maximizing self interest (this lies in confessing while the other remains silent) this does maximizes overall welfare by producing a net loss of only 1.

Prisoner A / Prisoner B	Confess	Not Confess
Confess	Both go to jail for 5 years (Net loss is 10)	A goes to jail for 7 years. B is released. (Net loss is 7)
Not Confess	B goes to jail for 7 years. A is released (Net loss is 7)	Both held for six months, then released. (Net los is 1.0)

Prisoner Dillema Options Summarized

Assumptions in the Prisoner Dilemma

- Cooperation produces the best collective option and the second best individual option. This, in turn, assumes that cooperation produces more social welfare than competition.
- Free riding (competing) on the cooperation of others produces the most individual gains (for the free rider) but the second worst collective results. Society suffers loses from the harm done to the trusting, non-confessor and from the overall loss of trust caused by unpunished free-riding.
- Unlimited, pure competition (both prisoners confess) produces the worst collective results and the second worst individual results.
- Multiple iterations of the prisoner's dilemma eventually lead to cooperative behavior. But what causes this? (1) The trust that emerges as the prisoners, through repeated iterations, come to rely on one another? Or (2) the fear of "tit-for-tat" responses, i.e, that free riding on the part of one player will be punished by free riding on the part of the other in future iterations?
- Does the Prisoner's Dilemma assume that each player is a rational, self-interest maximizer? Are the players necessarily selfish in that they will seek to maximize self interest even at the expense of the other players unless rewards and punishments are imposed onto the playing situation from the outside?

The Prisoner's Dilemma is designed to model the reality of corporate governance where the directors/owners of a corporation delegate responsibility for the corporation's operations to managers who are charged with pursuing, not their own interests, but those of their directors. The problem of corporate governance is how this cooperative arrangement is institutionalized. Can managers be left alone and trusted to pursue the best interests of the corporation? This is implied in stewardship theory. Or is it necessary to design a system of controls to keep the managers from diverting the operations of the corporation toward their exclusive, self-interests? This is the approach taken in agency theory. Modeling this in terms of repeated iterations of the prisoner's dilemma, does cooperation emerge as the most reliable strategy in the long run? Or does it need to be manufactured by introducing a system of incentives such as fear of tit-for-tat strategies? The Prisoner's Dilemma models the central problems of corporate governance by asking whether cooperation naturally emerges between managers and directors or whether it needs to be manufactured through a system of punishments and rewards.

The Prisoner's dilemma is discussed throughout the literature in business ethics. For a novel and insightful discussion in the context of corporate responsibility see Peter A. French, 1995 **Corporate Ethics** from Harcourt Brace College Publishers.

A Short Footnote on Human Nature

- One important means for classifying different approaches to corporate governance is to reflect on the
 associated account of human nature. This is a very complex issue but, fortunately, political philosophy
 provides us with some useful insights.
- Thomas Hobbes in the **Leviathan** presents a comprehensive psychological analysis of human nature based on seventeenth century physics. The focal point of this analysis is the human individual's unlimited pursuit of desire. Without external checks (primarily the threat of punishment imposed by a powerful sovereign) the **State of Nature** (where human individuals pursue self interest without external checks) is identical to a **State of War**. This war of all against all is "**solitary**, **poore**, **nasty**, **brutish**, **and short**."

- Hobbes's view has been characterized by C.B. Macphearson as "possessive individualism" which portrays the self as the possessor of its own attributes including the property acquired through its actions. This leads to a view called atomic individualism which is based on the claim that the self has its characteristics and determinate structure prior to and independently of any social interaction.
- Jean-Jacques Rousseau offers a brilliantly original criticism of Hobbes' conception of human nature in his Second Discourse, the Discourse on the Origin of Inequality. According to him, Hobbes's characterization of human nature in the State of Nature is actually a description of the human corrupted by society and the acquisition of property. "The first person who, having enclosed a plot of land, took it into his head to say this is mine and found people simple enough to believe him, was the true founder of civil society. What crimes, wars, murders, what miseries and horrors would the human race have been spared, had someone pulled up the stakes or filled in the ditch and cried out to his fellow men: "Do not listen to this imposter."" Rousseau argues that before the notion of property, the human's desire to preserve self was balanced by the social feeling of pity brought forth by the suffering of others. Only the unchecked pursuit of property (seen in terms of exclusive possession) would bring the motive of self-interest into conflict with natural pity.
- In opposition to Hobbes's atomic and individualistic self, a group of political philosophers, beginning with Aristotle, see the self as primarily social. Aristotle characterizes the human as a political animal (a being who naturally constructs a social organism called the "polus"). Sandel describes a "thick self" constructed out of familial, social and political content; this content is integrated into the core of the self. Werhane's description of this "social animal" is worth quoting in full: "In that socialization process, we develop a number of interests, roles, memberships, commitments, and values such that each individual is an historical, cultural, and social product, a pluralistic bundle of overlapping spheres of foci, a thick self or selves....
 [T]here is no self as precritical, transcendental subject, totally ideal spectator or dispossessed subject.
- Thus a series of views of human nature emerge that are instrumental in forming different approaches to corporate governance. Hobbes's atomistic individualism will favor the compliance approach mandated by agency theory as directors set up external checks to self-serving managers. Rousseau's more nuanced view would require structures to hold the pursuit of self-interest in check while strengthening the equally natural impulses toward socializability and cooperation. The social conception of the self would treat the corporation as an environment where managers, as stewards, recruit employees who will quickly commit to the central corporate values and then develop supporting structures and procedures to help their colleagues find meaningful work while fulfilling social, corporate objectives.

Approaches to Corporate Governance

(1,1)	Description (1,2)	Theory of Human Nature(1,3)	Owner Role(1,4)	Manager Role(1,5)	Corporate Ethics Focus(1,6)
Agency Theory(2,1)	Managers act as agents of the corporation fulfilling the goals established by the owners / directors(2,2)	Managers are rational, but self-interested beings who must be controlled from the outside(2,3)	Owners are principals, that is, they originate the action and bear primary moral responsibility. (2,4)	Managers are agents, that is, responsible for acting in the interest of the principals who hire them. Faithful	Compliance focus uses (1) rule-based codes (2) systems of monitoring, and (3) punishment and rewards to motivate

				agency implies avoiding conflicts of interests and maintaining confidences. (2,5)	compliance from outside.(2,6
Stockholder Approach(3,1)	Corporation is property of stockholders who dispose of it as they see fit. (3,2)	Stockholders pursue self interest. They are rational (instrumental), economic self-interest maximizers. (3,3)	Owners invest in corporation and seek a return (profit) on their investment. (3,4)	Managers are responsible for ensuring that owners get maximum return on investment. (3,5)	Stockholder direct compliance toward manager control and external conformity to laws.(3,6
Stakeholder Approach(4,1)	Owners drop out of center focus. Corporation is run for the sake of its stakeholders. (4,2)	Groups have special interests but recognize the need to integrate these. Humans possess capacity for procedural reasoning. (4,3)	Owners drop to one of a group of equal stakeholders. Still advocate their financial interests but not to exclusion of other stakeholders. (4,4)	Managers are metastakeholders. They treat stakeholders and stakes equally and integrate these to the fullest extent possible. (4,5)	(4,6)
Stewardship Model(5,1)	Managers act as stewards for absentee owners; oversee the operations of corporation and exercise care over them. Emotion (care) plays an equal role with instrumental rationality.(5,2)	Desire and self interest are balanced out by social motives such as Rousseau's pity and Aristotle's virtues.(5,3)	Owners still set cardinal objectives but they also are responsible for providing managers with a meaningful work environment. (5,4)	Managers are stewards exercising care over the property of the owners in their absence. Stewardship is based on internally generated and self- imposed motives toward care. (5,5)	Value-based (1) identify and formulate common standards of excellence, (2) develop training programs to foster pursuit of these excellences and (3) develop support structures to help reduce value "gaps."(5,6)

Summary TableThis table summarizes materials from Introduction: Theories of Governance (Clarke, 1 through 30) a provides a taxonomy of several different approaches to corporate governance.

Agency Theory

- 1. In agency theory, the owners/directors set the central objectives of the corporation. Managers, in turn, are responsible for executing these objectives in the corporation's day-to-day operations. Corporate governance consists of designing structures and procedures to control management, i.e., to keep their actions in line with director-established objectives.
- 2. Managers cannot be trusted to remain faithful agents, i.e., to stay faithful to the interests and goals of the owners/directors. This presupposes a particular view of human nature. Humans are rational, egoists. They have desires and use reason to devise means to realize them. Since one desire can be checked only by another desire, this egoism is potentially without limit. Agency theory assumes that managers will divert corporate resources to pursue their own selfish ends unless checked by some system of external controls. Thus, another key element of corporate governance under agency theory is to find the most efficient systems of controls to keep manager egoism in check.
- 3. The owners/directors play the role of principal in agency theory. The principal originates the action and bears primary moral and legal responsibility for it. Most of the time the principal of an action is also its executor. But there are times when the principal lacks the knowledge and skill necessary for executing the objectives he or she originates. In this case, the principal contracts with an agent. The principal authorizes the agent to act on his or her behalf. This requires that the agent remain faithful to the goals and interests of the principal. See Hobbes's **Leviathan**, Chapter 16 for an important historical account of the agent-principal relation.
- 4. Managers are agents. Their primary responsibility is to serve as faithful executors of the goals and interests of the principals. This requires, first, that, managers are responsible for exercising their professional judgment in a competent way. Managers are also responsible for remaining faithful to the interests of their principals. To do this they must avoid conflicts of interests and maintain confidentialities (i.e., keep secrets). Agent can also range from being free (unguided by principals) to bound (tightly monitored and controlled by principals).
- 5. How does ethics enter into corporate governance under agency theory? Primary emphasis is placed on compliance, i.e., enforced conformity to rules that constitute minimum thresholds of acceptable behavior. Compliance approaches develop (1) rule based codes, (2) systems of monitoring to detect violations, and (3) punishments and rewards to deter non-compliance and reward compliance. Trevino and Weaver provide an empirical analysis to the goals achieved through compliance ethics: "[4] the perception that better decisions are made because of the ethics program [5] ethical advice seeking, [6] decreased unethical behavior in the organization...[7] ethical awareness." (Weaver and Trevino, 1999: 333.)

Stockholder Theory

- 1. The stockholder approach is quite similar to that set forth in agency theory. The difference is that it views the corporation as the property of its owners (stockholders) who may dispose of it as they see fit. Most of the time this involves using it to receive maximum return on investment.
- 2. Stockholders are oriented toward self-interest, so stockholder theory, along with agency theory, takes an egoistic/Hobbesian view of human nature. Humans are rational, self-interest maximizers. Owners should expect this from the corporation's managers and employees. They should integrate procedures and controls that channel the corporation and its members in the direction of their (owners) self-interest.
- 3. The owners invest in the corporation and seek a return (profit) on this investment. But this narrow role has been expanded into overseeing the operations of the corporations and its managers to ensure that the corporation is in compliance with ethical and legal standards set by the government. Just as the master, under tort law, was responsible for injury brought about by the negligence of a servant, so also are directors responsible for harm brought about by their property, the corporation.
- 4. Managers are role-responsible for ensuring that investors get maximum return on their investment. This includes exercising good business judgment and avoiding conflicts of interests and violations of confidences.
- 5. Like corporations operating within agency theory, stockholder corporations focus on compliance strategies to monitor managers and make sure they remain faithful agents. However, directors under the stockholder approach also take seriously oversight responsibility which include ensuring corporate compliance with laws such as Sarbanes-Oxley and the Federal Sentencing Guidelines.

Stakeholder Theory

- 1. Owners drop out of the center of attention in this approach to become one of several, equal stakeholders. A stakeholder is any group or individual that has a vital interest, right, good, or value in play or at risk. (A gambler's stake is the money on the table in play as the roulette wheel turns. Depending on the outcome of the situation, the gambler either keeps or loses the stake.) Examples of corporate stakeholders include stockholders, employees, customers, suppliers, local community, and government. The corporation on this view exists for the sake of its stakeholders, not stockholders.
- 2. The stakeholder view can be closely tied to egoism if it is assumed that the different stakeholder groups exist to maximize their selfish interests. But the stakeholder approach to corporate governance goes beyond the egoistic account of human nature. The corporation (and its managers) become responsible for mediating between these different, often conflicting, stakeholder interests, always keeping in mind that all stakeholders deserve equal respect. If stakeholders have any solidarity with one another, it is because the interest set of each includes the interests of the others. (This is how Feinberg defines solidarity.) The ability to envision the interests of each stakeholder and to work toward integrating these must be built on a view of human nature that is as altruistic as egoistic. While not embracing the social view of human nature outlined above, the stakeholder view assumes that stakeholders are capable and willing to negotiate and bargain with one another. It begins, in other words, with enlightened and long term self interest.
- 3. The first feature of the owner role is the reduction in centrality mentioned just above. They advocate their interests in the same arena as the other stakeholders, but they also must work to make their interests compatible with the other stakeholders. This requires integrating interests when possible and drawing integrity-preserving compromises when necessary. (See Benjamin 1990).
- 4. Managers play an important meta-role here. They are faithful agents but of all stakeholders, not just stockholders. Thus, they becomes referees or (to switch metaphors) brokers between stakeholders. They oversee the generation of expansive corporate values capable of absorbing and integrating narrower stakeholder interests.
- 5. Stakeholder approaches combine compliance and value-based approaches. In compliance, corporate officers define a moral and legal minimum; this consists of the minimum set of rules necessary for stakeholder coexistence. Beyond this, value-based approaches seek to create common, broader objectives, aspirations that can unite the different stakeholders in the pursuit of excellence. Stakeholder approaches need both; the compliance approach gets things started and the values-based approach sets them on the path to excellence.

Stewardship Theory

- Managers and employees can be trusted to act as stewards or guardians of the corporation. This means that while they do not own the corporation's resources, they will safeguard these for the owners. A steward is a caretaker who looks after the owner's property and interests when the owner is absent
- This approach definitely makes use of the social approach to human nature. Humans, naturally and spontaneously, realize their innermost natures by forming social unions. The corporation, under this view, is such an organization. While taking on the characteristics of a social contract with the other approaches, especially agency theory, the corporation under the stewardship view is more of a cooperative, collaborative enterprise. Humans can act and find meaning in interests and concerns well beyond the confines of the ego. In fact, to organize the corporation around egoistic assumptions does harm to those capable of action on altruistic motives. The emphasis here is on building trust and social capital to strengthen the social potentialities of human nature.
- Owners still establish the cardinal objectives for the sake of which the corporation exists. But they are also
 responsible for providing managers with an environment suitable developing human potentialities of forming
 societies to collaborate in meaningful work.
- Managers act as stewards or caretakers; they act as if they were owners in terms of the care and concern
 expressed for work rather than merely executors of the interests of others. In other words, the alienation
 implied in agency theory (acting not out of self but for another), disappears as the managers and employees of
 the corporation reabsorb the agent function.
- Stewardship approaches are primarily value-based. They (1) identify and formulate common aspirations or values as standards of excellence, (2) develop training programs conducive to the pursuit of excellence, and (3) respond to values "gaps" by providing moral support.

External Controls: Fining, Stock Dilution, Changing Internal Governance, Court Ordered Adverse Publicity, and Community Service

	Description	Example	Target of Punishment	Deterrence Trap Avoided?	Non- financial Values Addressed?
Monetary Exaction	Fines	Pentagon Procurement Scandals	Harms innocent	Fails to Escape	Few or None Targeted
Stock Dilution	Dilute Stock and award to victim		Stockholders (Not necessarily guilty)	Escapes by attacking future earnings	Few or None
Probation	Court orders internal changes (special board appointments)	SEC Voluntary Disclosure Program	Corporation and its Members	Escapes since it mandates organizational changes	Focuses on management and subgroup values
Court Ordered Adverse Publicity	Court orders corporation to publicize crime	English Bread Acts (Hester Prynne shame in Scarlet Letter)	Targets corporate image	Escapes (although adverse publicity indirectly attacks financial values)	Loss of prestige / Corporate shame / Loss of Face/Honor
Community Service Orders	Corporation performs services mandated by court	Allied chemical (James River Pollution)	Representative groups/individuals from corporation	Escapes since targets non- financial values	Adds value to community

Classifications of Corporate Punishments from French and FisseThis table summarizes material from Brent Fisse, "S Limitations of fines and the enterprise of Creating Alternatives." This article is found in the book, **Corrigible Corpo** provides a taxonomy of different forms of punishment for corporations. It helps rate a corporate punishment in terms produces a positive change within the corporation, avoids Coffee's deterrence trap, and minimizes interference in whox. For full reference to book see bibliography below.

Requirements of Sarbanes-Oxley (From Dyrud: 37)

- Provide increased protection for whistle-blowers
- Adhere to an established code of ethics or explain reasons for non-compliance
- Engage in "full, fair, timely and understandable disclosure"
- Maintain"honest and ethical" behavior.
- · Report ethics violations promptly
- Comply with "applicable governmental laws, rules, and regulations"
- Dyurd cites: ELT, **Ethics and Code of Conduct**, n.d.; http://www.elt-inc.com/solution/ethics_and_code_of_conduct_training_obligations.html

Ammended Federal Sentencing Guidelines (Dyrud 37)

- Establishing standards and procedures to prevent and detect criminal conduct
- Promoting responsibility at all levels of the program, together with adequate program resources and authority for its managers
- · Exercising due diligence in hiring and assigning personnel to positions with substantial authority
- · Communicating standards and procedures, including a specific requirement for training at all levels
- Monitoring, auditing, and non-internal guidance/reporting systems
- Promiting and enforcing of compliance and ethical conduct
- Taking reasonable steps to respond appropriately and prevent further misconduct in detecting a violation

What you will do ...

Module Activities

- Study the Prisoner's Dilemma to help you formulate the central challenges of corporate governance.
- Study four different approaches to corporate governance, (1) agency theory, (2) the stockholder approach, (3) the stakeholder approach, and (4) stewardship theory.
- Examine corporate governance from the macro level by (1) looking at the structural changes a company can make to comply with legal and ethical standards and (2) examining the balances that government must make to control corporate behavior and yet preserve economic freedom.
- Design a corporate governance program for an actual company that you and your group choose. It should be a
 company to which you have open access. You will also be required to take steps to gain the consent of this
 company for your study.
- Reflect on how to integrate this module's macro description of corporate governance with the micro perspective presented in the module on moral ecologies and corporate governance.

Corporate Governance Plans

- A corporate code of ethics that responds to the specific ethical problems uncovered by your profile of the corporation you are studying.
- A corporate ethics training program designed to acquaint employees, owners, and managers with the company's value aspirations and compliance objectives.
- A Corporate Ethics Audit designed to identify and minimize ethical risks.
- A comprehensive ethics compliance program that responds to the requirements set forth in Sarbanes and Oxley as well as the Federal Sentencing Guidelines.
- A program in corporate excellence designed to articulate and realize the core values that define your company's identity and integrity.

What did you learn?

This material will be added later. Students will be given an opportunity to assess different stages of this module as well as the module as a whole.

Appendix

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Moral Ecologies in Corporate Governance

(Caution! This module is still under development and changes are planned for the near future.) Recent work in moral psychology has established the profound impact that the context in which business is carried out has on business practices and practitioners. Moral ecologies are defined here as the various nested and overlapping social and organizational contexts that form the backdrop of human behavior and actions. This module is designed to help students identify different moral ecologies and design successful moral careers to respond to their special challenges. This module falls within the corporate governance unit of the courses Business, Society, and Government (GERE 6055) and Corporate Leadership and Social Responsibility (ADMI 3405). It has been developed through a National Science Foundation funded project, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF-SES-0551779, also called the EAC Toolkit. Word Version of this Template

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Thought Experiment: Plato--The Ring of Gyges

The Ring of Gyges (Plato's Republic II, S359)

Gyges a poor shepherd is tending his flock when there is an earthquake. A hugh crack opens in the earth to expose a sarcopagus. Gyges reaches in and takes the ring that draws his attention. Later, when he is talking among friends, he notices that he becomes invisible when he turns the ring in toward himself. He tries this out a few times and then forms his plans. Invisible, he gains entry to the king's castle and rapes the queen. Drawing her into his nefarious plan, they kill the king and take over the kingdom. Gyges marries the queen and becomes ruler of a large and wealthy kingdom. Somehow it doesn't seem fit to say that he lives "happily ever after." But, since he is never caught, it doesn't follow that his ill-gotten gain has made him miserable.

Before finding his ring, Gyges was, at least outwardly, a well-behaved, just citizen. But the combination of vast power and no accountability drew Gyges over to the dark side. Does the human character, like that of Gyges, dissolve in the face of temptation and lack of accountability? Is the threat of punishment necessary to keep individuals moral? Is visibility and the threat of punishment all that stands between an individual and a life of injustice?

Thought Experiment: The Milgram Experiments

From 1960 until 1963, Stanley Milgram, a social psychologist, carried out a series of experiments on around 1000 subjects. Each experiment brought together three participants, a subject (or teacher), a learner, and an experimenter. In the initial orientation, the experimenter told the subject/teacher and the learner that they were about to participate in an experiment designed to measure the influence of punishment (in the form of electrical shocks) on learning. The learner was presented with information. The teacher then asked questions based on this information. If the learner answered correctly, then they went on to the next question. If the learner answered incorrectly, then he was given an electrical shock by the teacher. With each missed question the intensity of the shock increased. The experiment continued until all the questions were asked and answered.

However, these instructions constituted a deception brought upon the teacher/subject by the secret collaboration of the experimenter and the learner. The real purpose of the experiment was to determine how far the teacher/subject would go in turning against his or her moral views at the urging of an external authority. The learner feigned pain and suffering because there was no actual electrical shock. The learner also deliberately missed most of the questions in order to force the teacher to progress to higher and what appeared to be life-threatening levels of

shock. While teachers were not physically forced to continue the experiment over the feigned protests of the learners, whenever they tried to stop it, they were told by the experimenter that they had to continue to the end.

Before the Milgram experiments were carried out, a group of psychogists were asked to predict how many teachers/subjects would go all the way to the end and give the learner what they thought were life-threatening and highly painful shocks. The consensus was that most would stop the experiment early on when the learner first began to protest. But the actual results went contrary to these predictions. Over 60 percent of the teachers went all the way and gave the learner the maximum shock. You can read more about these experiments and how they have been interpreted by reading Milgram 1974 and Flanagan 1991. You Tube has several video vignettes on the Milgram Experiments. Simply type "Milgram Experiments" in the search window and browse the results.

Milgram argued that his research demonstrated a propensity to delegate moral authority for one's immoral actions to those in positions of power and authority. Others have pushed these results further to assert situationalism, i.e., the claim that forces arising in situations can overpower and annul the expression in action of self, character, and character traits. In addition to what Milgram claims, opponents of virtue theory would claim that Milgram's experiments offer conclusive proof that moral exemplars, i.e., individuals who exhibit sustained moral careers through the strength of their characters and moral virtues, do not exist and cannot exist (See Gilbert Harmon). And setting forth these so-called moral exemplars as models imposes on students moral standards that are not minimally, psychologically realistic.

Thought Experiment: Zimbardo and the Standford Prison Experiment

In many ways, Zimbardo's experiments appear equally damaging to virtue and moral exemplar theory. Students were recruited to take part in a prison experiment. After being carefully screened for any abnormal psychological traits, they were randomly assigned the roles of prisoner guard and prisoner. The prisoners were arrested at their homes and taken to the psychology building at Stanford University whose basement had been made over to resemble a prison. The experiment was designed to last for two weeks but was halted mid-way because of its harmful impacts on the subjects. The guards abused the prisoners, physically and psychologically; individuals who behaved normally before the experiment, became sadistic when playing through the prison guard role. The prisoners were traumatized by their experience and many experienced breakdowns; all testified to how they forgot who they were before the experiment began; their normal identities were absorbed and cancelled by their new identities stemming from the role "prisoner" and from the dehumanizing treatment they received from the guards.

Just as the Milgram experiments have been used to demonstrate the weakness of character in the face of situation-based pressures, Zimbardo's experiments have been used to demonstrate the fragility of moral and personal identity. Powerful roles overwhelm moral integrity and conscience; individuals give way to the corrupting demands of immoral roles.

Nevertheless, Milgram and Zimbardo both pull up well short of this extreme position. Milgram talks of a former subject who used the knowledge he gained about himself as a subject in the obedience to authority experiment to strengthen his character and successfully take a leadership role in the protest movement against the Vietnam war. And Milgram also profiles two individuals who offered firm and resolute disobedience when asked to continue the experiment over the objections of the victim/learner. When the experimenter prompted Jan Rensaleer that he "had no other choice [but to continue]," he replied, "I came here on my own free will." Gretchen Brandt, a woman who spent her youth in Nazi Germany, responded similarly. To the same prompt she replied, "I think we are here on our own free will." During the post-experiment debriefing, both emphasized not giving over responsibility for their actions to others and acknowledged that their experience with the Nazis (Rensaleer lived in the Netherlands during the Nazi occupation) may have helped them in carrying out their acts of disobedience. In reflecting on her reason for disobedience, Brandt also added, "Perhaps we have seen too much pain."

Zimbardo also thinks that individuals can develop strategies, skills, and practices to keep hold of their moral selves in the face of strong situation and role-based pressures. These consist of exercises to gain distance and perspective on the situation and to recall oneself to one's character and personality. Here are some examples from The Lucifer Effect of his "Ten-Step Program:"453-454

- "I am responsible."
- "I will assert my unique identity."
- "I respect just authority but rebel against unjust authority." our second item here
- "I will not sacrifice personal or civic freedoms for the illusion of security."

From Gyges, Milgram, and Zimbardo to Moral Ecology

These thought experiments raise the question of the influence of environment on character and on individual agency. As we have repeatedly seen this semester, the environments of the organization (ethical, technological, organizational, and economic) all constrain agency in certain ways and enable or empower it in others. This module is designed to help you identify how the organizational environment creates a moral ecology that constrains and enables your ability to act. (You can be pressured to act against conscience as the Milgram experiments show. And you can lose your sense of self in a particularly power role and role-supportive environment.) It is also designed to suggest strategies that increase the strength of moral character by identifying different organizational environments (finance-, customer-, and quality-driven corporations) and calling upon you to develop special skills that help you to keep moral and personal commitments in tact.

Introduction

Corporate governance is defined in the Blackwell Encyclopedic Dictionary of Business Ethics as "concerned with those decisions made by the senior executives of a firm and the impacts of their decisions on various stakeholder groups." (EBE 147) This module turns corporate governance inside-out and looks at it from the perspective of the governed, that is, from the directors, managers, and employees subject to the structures and strategies of corporate governance. Corporate environments function as "moral ecologies," that is, "the somewhat stable, but constantly negotiated set of values, practices, and influences within societies, organizations, professions, and work groups." (Huff et. al., 2008) The thrust of this module is to help you begin to strategize on how to develop sustainable moral careers within different moral ecologies. You will study different kinds of moral ecologies using a taxonomy developed from the research of Michael Davis in **Thinking Like an Engineer** and Robert Jackall in **Moral Mazes**. Huff (2008) provides some generic strategies for individuals to pursue within in these organizational environments. But the exercises included in this module will encourage you to expand upon this list. Working through this module will help you to view corporate governance from within from the micro perspective of the individual. Another module will allow you to see corporate governance from the outside from the macro point of view.

What you need to know ...

Personality Characteristics: The "Big Five" (plus one)

So much of success in practical and professional ethics lies in anticipating and defusing potential ethical challenges. Called "Preventive Ethics," this approach encourages you to develop the skill of uncovering latent or hidden ethical problems that could erupt into full-blown ethical dilemmas. "An ounce of prevention is worth a pound of cure." This module is designed to help you reflect on your personalty, different organizational environments or ecologies, and how your personality fits into these moral ecologies. Your success depends on developing plans for successful moral careers that respond to your personality traits and resist ethical challenges presented by organizational environments.

Personality Characteristics: Find your place on the continuum

1. Extraversion	Introversion
2. Neuroticism	Emotional Stability
3. Conscientiousness	Carelessness.
4. Agreeableness	Disagreeableness
5. Openness (to experience	Closed (to experience)
6. Honesty/Humility	Dishonesty/Arrogance

This account of personality modifies that presented by Huff et al in "Good computing: a pedagogically focused model of virtue in the practice of computing, parts 1 and 2."

Type / Characteristics	Managers and engineers: role and participation	Centrality of ethics and values	Allocation of praise and blame	Withholding information	Treatment of dissent and DPOs
Finance- Driven	Managers play line role (=make decisions) Engineers provide technical information (=staff role)	Ethics and values are side constraints dealt with when they oppose financial considerations	Allocated according to hierarchical position: praise goes up and blame goes down.	Managers withhold to control and protect secrets. Engineers withhold bad news to avoid blame.	"Shoot the messenger!' Dissent = disloyalty and betrayal.
Customer- Driven	Managers make decisions on financial matters. Engineers "go to the mat" on engineering matters.	Ethics and values are not central but are still important.	Praise and blame are fairly allocated based on assigned responsibility and contribution.	Information not withheld but gaps arise because or role differences.	Differences occur but engineers are expected to advocate their perspective in decision making process.
Quality-Driven	Manager and engineering distinction drops out. Interdisciplinary work teams are empowered and responsible	Ethics and values are constitutive of the organization's identity.	Praise and blame are attributed to group and distributed to individuals within according to contribution.	Open consensus process ensures that needed information is integrated into decision making	Engineers and managers work toward consensus by gathering more information continuing the discussion, and (as last resort) postponing the decision until consensus is reached.

Summary TableThis table and the explanatory material below summarizes materials from studies reported by Davis

(Thinking Like an Engineer) and Jackall (Moral Mazes). The reader should be aware that it departs somewhat from strictly reported results in order to adopt the results to the idea of moral ecology. This later idea was introduced by R Park in **Human Communities: The City and Human Ecology**, Free Press, Glencoe, IL, 1952.

Breakdown of Table

- Moral ecologies can be categorized according to a series of considerations. The table above focuses on five.
- First, managers and engineers occupy distinct roles and participate differently in the decision making process. Managers play the **line** role. They collect information to make decisions that govern the day to day operations of the corporation. Engineers are hired as **staff** employees. They provide technical information to decision makers but do not participate directly in the decision making process. This raises difficulties when engineers, for technical or ethical reasons, disagree with the decisions taken by their managers. The line and staff roles channel decision making and constrain dissent.
- Moral ecologies can also be typed according to the centrality of ethical considerations in the corporation's goals, charter, operations, and even identity. Ethical considerations can range from (1) playing a **central** role, (2) to playing an important but subordinate role, (3) to being marginalized as irrelevant **side constraints**. The importance a corporation places on ethics colors all the other categories mentioned in the table above. If ethics is central to a corporation then it plays a central role in the decision making process, guides the allocation of praise and blame, determines the nature and amount of information shared in the decision making process, and determines how an organization treats dissent and disagreement.
- A corporation's conception of responsibility is revealed through the ways in which it allocates praise and blame. Significant differences arise between the way finance companies assign praise and blame and the ways these are allocated in quality or customer driven companies. Again, this related to the roles played by engineers and managers and the centrality of ethics in the corporation's governance.
- Ethical problems arise when crucial information is withheld from the decision making process. Hence, the flow of communication and the kinds of situations in which communication flow is disrupted helps to characterize a moral ecology. For example, the Hitachi report asserts that communication between managers and engineers breaks down predictably within finance-driven companies. This breakdown is grounded in the characteristics of the finance-driven moral ecology, especially in differences between the managerial and engineering roles and the extent to which managers and engineers participate in decision making.
- Finally, moral ecologies can be classified according to how they treat dissent and dissenting professional opinions. Dissent is less likely in quality than in finance-driven companies. While finance-driven companies treat dissent as disloyalty, quality- and customer-driven driven companies treat dissent as a stage in the process of reaching consensus.

Finance-Driven Companies

- 1. Finance-driven companies place financial objectives at the very heart of their constitutive objectives and corporate identity. For example, such companies are focused on maximizing returns for investors.
- 2. Manager and Engineer Roles and Participation in Decision Making Process: Managers play the line role in that they make the decisions that drive the day to day operations of the corporation. They bear responsibility for the consequences of their decisions and they are also responsible as the faithful agents of the company's directors. Being a faithful agent requires that one treat another's interests as one's own, maintain confidentialities, and avoid interests that conflict with the director. Engineers play the staff role, that is, they answer questions put to them by managers and are responsible for providing competent technical information. However, they do not participate directly in the decision making process, nor do they bear responsibility for the results of their manager's decisions.
- 3. **Centrality of ethics and values in the corporations decision making process**: Ethical considerations play only the role of side constraits in the setting of corporate policity and in the formulation and execution of its decisions. This means that ethical considerations are important only if they promote or interfere with the central, financial objectives. If appearing philanthropical is good for a corporation's image (and generates customers and profits) then the corporation appears philanthropic. If the corporation is likely to get caught in an ethical violation (excessive pollution) and this negative publicity will lower its prestige (and profits) then the corporation will not commit the violation. But in each case, the end is the promotion of financial objectives and the means are appearing ethical.

- 4. **Allocating Praise and Blame**Jackall goes into detail on how finance-driven corporations (and bureaucracies in general) assign praise and blame. The crucial factor is one's position in the corporate hierarchy. Praise works its way up the corporate ladder. If engineer Smith saves the company from a sever financial loss, then Smith's supervisor (or his supervisor's supervisor) gets the credit. However, if Smith's supervisor messes up, the blame passes down the corporate ladder to Smith. Praise moves up the corporate hierarchy, blame down.
- 5. **Information Exchange between Engineers and Managers**: In finance driven companies, managers withhold information from the engineers under their supervision for a variety of reasons. For example, if it is proprietary information, the manager may withhold all or part to prevent engineers from leaving the firm and revealing its secrets to a competitor. Managers may also use information to wield power and authority. By keeping engineers in the dark (like mushrooms) they effectively maintain authority and prevent dissent. On the other hand, engineers withhold bad news from their managers to avoid blame as well as the "shoot the messenger" syndrome. (When the incompetent general receives bad news from a soldier, he shoots the soldier rather than respond to the news.)
- 6. **Handling Dissenting Professional Opinions**: Dissent is interpreted as disloyalty in finance-driven companies. This organizational habit (maintained by managers to hold on to their authority) will even undermine DPO (dissenting professional opinion) procedures that look good on paper. A good DPO procedure communicates the opinion to several levels of supervisor, allows for the independent investigation of the merits of the opinion, and prevents retaliation against the professional asserting the opinion. But ruthless managers find ways to undermine such a procedure at all levels. Engineers may claim the right not to be held as scape goats to administrative incompetence. (See the Theory Building Activities: Rights module) This right may be supported on paper by a detailed DPO procedure. But it also has to be implemented at all levels and continually monitored.

Customer-Driven Companies

- Customer-driven companies focus on customer satisfaction. If the customer asks for or is satisfied with a lower quality product, then this is an acceptable result for this type of company as opposed to a quality driven company which would stand fast with the higher quality product.
- Managers and engineers: roles and participation: Managers make decisions on financial matters. But engineers are expected to "go to the mat" for engineering standards when these form all or part of the decision. Hence the distinction between managers (playing the line role) and engineers (playing the staff role) weakens, and engineers play a much more active role (advocates for engineering standards) in decision making. (Engineering standards include engineering ethics standards.)
- **Centrality of Ethics and Values**: While customer satisfaction plays the central role, ethical considerations are still important, especially regarding the ethical treatment of customers and reflecting the ethical values held by the customers. In many cases, it is difficult to distinguish quality and customer driven companies as the role ethical standards play gets closer to a central, constitutive one.
- **Allocation of Praise and Blame**: Responsibility in customer driven companies is tied closely to individual performance and contribution. This is because customer satisfaction is a more objective criterion than the internal political standards that dominate finance driven companies. Responsibility is closely alligned with contribution.
- Withholding Information: Information enhances control and responsibility. (The more you know, the more
 reponsibly you can act.) Since praise and blame are allocated according to contribution, there is less incentive
 to withhold information. If communication gaps arise between engineers and managers, these are much more
 likely to hinge on disciplinary differences. Engineers may have trouble communicating technical information
 to managers, or appear condescending by "dumbing down" the information. Managers may have difficulties
 communicating financial constraints to engineers who focus on quality standards. But these are minor,
 resolvable gaps.
- **Treatment of Dissent**: Dissent and disagreement are not only tolerated but actually expected. Managers expect engineers to advocate for issues in their sphere as they pertain to the decision making process. This process itself is adversarial because it is assumed that this is the best way to get all the information out on the table. Bad news and professional dissenting opinions are not interpreted as disloyalty; in fact, disloyalty lies in refusing to expose flaws in the choices proposed by one's supervisor. Managers expect their engineers to "go to the mat" when advocating technical positions based on their professional judgment.

Quality-Driven Companies

- Quality-driven companies stand out for the emphasis they place on achieving high engineering standards and
 on elevating the participation of the engineer in the decision making process. As is implied by the name, the
 central focus of these corporations is the achievement of high quality in products and services.
- Managers and Engineers: Role and Participation: In quality-driven companies, the distinction between the
 manager and engineering roles drops out. For example, while engineers play the staff role and provide expert
 engineering advice, they also participate fully in the decision making process. The locus of decision making
 moves from individual managers to small interdisciplinary groups. These groups, in turn, carry out consensusbased decision making procedures.
- Centrality of Ethics and Values: In quality-driven companies, ethics and values are central to the
 organization's objectives, charter, and identity. This has a decisive impact on the role of the engineer in the
 decision-making process. In customer driven companies, engineers are expected to advocate engineering and
 ethical standards precisely because these are not central to the organization's identity. But the centrality of
 ethical concerns in quality driven companies changes the engineer's role from advocacy to channeling
 technical expertise toward realizing ethical value.
- Allocation of praise and blame: In customer-driven companies, blame avoidance procedures no longer dominate the decision making process. In quality driven companies they disappear completely. Decisions are made by interdisciplinary groups in which engineers and managers participate fully and equally. Responsibility (praise and blame) then is allocated to the group. If it is distributed to members inside the group it is done so on the basis of contribution. But the primary target of responsibility ascriptions is the group, not the individual. And the response to untoward happenings is not targeting individuals and groups for blame but taking measures to learn from mistakes and avoiding them in the future.
- **Withholding Information**: The open, consensus-based decision process ensures that the needed information is brought forth and integrated into the decision. This results from removing a primary motivation to withholding information, namely, blame avoidance. Quality-driven corporations aggressively move to prevent untoward occurrences and, should prevention fail, make adjustments to ensure they do not reoccur. The motive to withhold information does not arise in this moral ecology.
- Treatment of Dissent and DOPs (dissenting professional opinions): Engineers and managers work toward consensus by gathering information, discussing the problem and continuing the discussion until consensus is reached. Thus, dissent does not stand alone but is considered to be an essential and healthy component to the decision-making process. When consensus is not immediately reached, participants seek more information. If consensus is still not reached, the decision is postponed (if this is possible). The most viable strategy to reach consensus is to continue the discussion. For example, an engineer and manager might approach a supervisor; in this way they bring a new perspective into the decision-making process. They might consult other experts. The crucial point here is that disagreement (really non-agreement) is not a bad thing but a necessary stage in the process of reaching agreement and consensus.

Skill Sets

- The four skills described below are derived from studying the moral expertise displayed by moral exemplars. Each moral ecology will require the exercise of each of the skills described below. However, each skill has to be contextualized into the moral ecology. For example, reasonableness should not be exercised in the same way in a finance-driven company as it should be exercised in a quality-driven company. The reasonable exercise of dissent is manifested differently in an environment where dissent is equated with disloyalty than in one in which dissent is embraced as a necessary part of the consensus-reaching process. So your job, in constructing your moral careers within these different moral ecologies, is to contextualize the skill, that is, describe specifically how each skill should be practiced in each particular moral ecology.
- **Moral imagination** consists of projecting oneself into the perspective of others. It also includes multiple problem definitions and the ability to distance oneself from the decision situation to gain impartiality.
- **Moral creativity** is the ability to generate non-obvious solutions to moral challenges while responding to multiple constraints.
- **Reasonableness** consists of gathering relevant evidence, listening to others, giving reasons for one's own positions (arguments and evidence), and changing plans/positions only on the basis of good reasons.
- **Perseverance** involves planning moral action and responding to unforeseen circumstances while keeping moral goals intact.

Personality Traits

- Extraversion: Extraversion, which is paired with its opposite, introversion, has also been called confident self-expression, assertiveness, social extraversion, and power. An individual in whom this trait dominates tends to be assertive and out-going.
- **Conscientiousness**: Individuals with this trait are successful in carrying out tasks because they can discipline themselves to stay focused on a task. They are successful in the right moral ecology and tend to conform to the basic norms of their environment. This trait can lead to bad results if not guided by moral considerations.
- **Neuroticism**: This trait indicates a lack of emotional stability. According to Huff et al., "it is correlated with less effective coping and depression." Neuroticism has also been shown to interfere with the exercise of moral skills. Is there a particular moral ecology that can heighten the negative impacts of this personality trait?
- **Agreeableness**: According to Huff et al, this trait has also been called "social adaptability, likability, friendly compliance, and love." Again think about how this trait would operate within a finance-driven moral ecology as opposed to a quality-driven one.

Two Kinds of Moral Expertise

- Studies carried out by Chuck Huff into moral exemplars in computing suggest that moral exemplars can operate as craftspersons or reformers. (Sometimes they can combine both these modes.)
- Craftspersons (1) draw on pre-existing values in computing, (2) focus on users or customers who have needs, (3) take on the role of providers of a service/product, (4) view barriers as inert obstacles or puzzles to be solved, and (5) believe they are effective in their role.
- Reformers (1) attempt to change organizations and their values, (2) take on the role of moral crusaders, (3) view barriers as active opposition, and (4) believe in the necessity of systemic reform
- These descriptions of moral exemplars have been taken from a presentation by Huff at the STS colloquium at the University of Virginia on October 2006.

Skill sets, personality traits, and kinds of moral expertise are discussed in detail by Huff et al., "Good computing: a pedagogically focused model of virtue in the practice of computer, parts 1 and 2." These are published in **Information, communication and Ethics in Society**, Emrald Group Publishing Limited, Vol. 6, numbers 3 and 4 in 2008.

What you will do ...

In this section, you will learn about this module's activities and/or exercises. You will also find step by step instructions on how to carry them out.

Exercise 1: What we do when nobody is looking

- You will be asked either to defend or criticize the following position on the nature and function of punishment
- Entiendo que ser castigado es una manera de educar a la persona a cometió la falta y a la sociedad en general para que comprendan y entiendan que su conducta es una falta y afecta a la sociedad. En conclusión es una solución viable hasta el memento bastante efectiva siempre y cuando el castigo sea ejecutado de una manera prudente, saludable y dentro de lo que las leyes permiten.
- I understand that punishment educates both the individual at fault and society in general in order that they understand that their conduct is faulty and that it effects society. In conclusion, it is a viable solution and, up to the moment, sufficiently effective always and when the punishment is executed in a prudent and safe manner within what is permitted by the law.
- Restate this argument in your own words. (Try to shorten it by summarizing its key points.) Then discuss and clarify its key terms. Offer ethical and practical considerations in its defense.

Exercise 2: Milgram and Business

- Continuing with the task in part one, you will be asked to either defend or criticize the following position on the meaning that the results of the Milgram experiments have for business administration
- The Milgram experiments teach us that under the right conditions, anyone is capable of committing immoral activities. If a strong, dominant boss exists and has a weak, dependable employer, then the employer will out of necessity do whatever the boss wants.

- Many people are willing to commit immoral acts even though they know it is wrong if they know they are not being watched.
- It teaches us that many employees tend to do illegal works just because their managers ask them to so they assume they will be taking full responsibility for the situation even though it is unethical.

Exercise 3: Commentary Groups

- Your job is to evaluate the arguments made by the teams debating in parts one and two. Be sure to focus on the argument and not the content of the position. Listen to their statements.
- Do they base these on sound statements?
- What kind of ethical and practical principles (or values) do they use to make their case?
- Do their frame their position broadly or narrowly?

Exercise 4: Closure Groups

- After listening to the debate and commentary, recap what has happened and discuss whether there are any conclusions that can be drawn from this activity
- Do people agree or disagree about these 2 issues?
- If there is agreement, why does it exist?
- If there is disagreement, why does it exist?
- Is agreement possible? Why or why not?

Exercise 5

- Which moral ecology would you like to work in: finance-, customer, or quality-driven companies?
- Why? Specify your answer in terms of how the company allocates praise or blame, the centrality of moral
 concerns, the role given to professionals, the circumstances under which information is withheld, and the
 typical response to bad news.
- Why? What configuration of personality traits best fits within which moral ecology?

What did you learn?

This module was designed to help you visualize how to realize a moral career within three dominant moral ecologies. Apply these matters to yourself. Which moral ecology would be best for you? Of the two moral careers mentioned above, reformer and helper, which best fits your personality? Why? In other words, begin the process of visualizing and planning your own moral career.

Appendix

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This optional section contains additional or supplementary information related to this module. It could include: assessment, background such as supporting ethical theories and frameworks, technical information, discipline specific information, and references or links.

EAC ToolKit Project

This module is a WORK-IN-PROGRESS; the author(s) may update the content as needed. Others are welcome to use this module or create a new derived module. You can COLLABORATE to improve this module by providing suggestions and/or feedback on your experiences with this module.

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Corporate Ethics Compliance Officer Report

Note: This module has been designed to bring together the following modules responding to the AACSB four ethics themes, corporate leadership, ethical decision-making, corporate social responsibility, and corporate governance. The links in this module tie it directly to EAC Toolkit modules that will help in preparation of the CECO report. The include the following:

- Type or paste the content directly into the appropriate section
- Socio-Technical Systems in Professional Decision Making (m14025)
- Developing a Statement of Values (m14319)
- Pirate Code for Engineering Ethics (m13849)
- Moral Ecologies in Corporate Governance (m17353)
- Three Views of Corporate Social Responsibility (m17318)
- Different Approaches to Corporate Governance (m17367)

These modules have links of their own that will prove invaluable for this activity. An example is the Leeds School of Business at the University of Colorado; this link connects to a search engine for finding codes of ethics and corporate social responsibility programs.

The media file below provides a generic poster

presentation template geared toward this assignment.

Template for CECO Poster Presentation https://cnx.org/content/m18646/

This media file provides a template of the poster presentation required for ADME 3405, the course "Corporate Leadership and Social Responsibility." The different sections can be filled in by preparing PowerPoint slides, pressing control + Print Screen when in presentation viewing mode, and copy-pasting into appropriate part of poster template slide.

Introduction

You are the CECO of your company. Being familiar with the requirements of Sarbanes-Oxley and the Federal Sentencing Guidelines, you have been charged with developing a comprehensive ethics program that includes (1) a socio-technical system study, (2) a corporate code of ethics, (3) an ethics training program for new and ongoing employees, (4) an ethics hotline or some other reporting mechanism, (5) a CSR (corporate social responsibility) challenge, and (6) recruitment and leadership strategies for implementing ethics. Your report will begin with an executive summary and

end with a concluding section that discusses implementation issues and needs.

What you need to know ...

Sections of CECO Corporate Ethics Report

- 1. Executive Summary (1 page)
- 2. Socio-Technical System Table plus written explanation. (3-5 pages)
- 3. Corporate Code of Ethics that provides core values, a description of each value, and how you plan to disseminate and implement your code. (3-5)
- 4. CSR (Corporate Social Responsibility) Challenge
- 5. Description of Ethics Training Program including activities and required resources (3-5 pages)
- 6. Recruitment and Leadership Strategies for Implementing Ethics into your organization (3-5 pages)
- 7. A Conclusion that includes a summary of the report, a time frame for implementing your ethics program, and an inventory of program needs and resources (1 page)

What you will do ...

Executive Summary

The executive summary should be no more than one page. Expect to write this several times because it needs to be the clearest and best written section. Written for your CEO, it should provide a quick two minute summary of your ethics plan. Write it in active voice, use ordinary language, and make references throughout the summary to the sections of the report that provide more in-depth analysis of the issue at hand. In this section you will tell your reader what you are going to say in the report.

Socio-Technical System

• This section will provide both a table and written description to help your reader understand the socio-technical system in which your company works and which provides the ethical and social challenges to which your program will respond.

- For information on how to compose a STS table and the different frames covered refer to module m14025, Socio-Technical Systems in Professional Decision-Making. The table for Burger Man provides frames that will be most relevant to this module but there are also other STS tables adopted for use in power engineering and engineering practice in Puerto Rico.
- Your written analysis should summarize and explore in more detail the STS issues that you are addressing in your corporate ethics plan. These would include compliance issues as well as fields in which your corporation's aspirations could be realized.

Corporate Code of Ethics

- Your job here is to write a code of ethics for your corporation emphasizing the key value aspirations and CSR challenges that your are targeting in your ethics program. Your code should include...
- The values that form your corporation's highest and central commitments.
- A description or profile of each value. See the Developing a Statement of Values module for more on this.
- How your values apply to both the corporation's stakeholders and to its key CSR challenges.
- You should be clear about the function your code is playing both within your ethics plan and within the corporate organization. Six key functions are (1) to educate, (2) to foster an ethical dialogue, (3) to discipline employees, (4) to support employees in their efforts to realize the corporation's core commitments/values, (5) to communicate these commitments/values to employees and other stakeholders, and (6) to serve as a public testament of the key ethical and value commitments that define the integrity of your organization.

Ethics Training Program

• This section details how you educate employees on the key components of your ethics program including the core ethical and value commitments. It should also provide means for getting employee buy-in for the ethics program as well as components that help

- employees with special ethical challenges. It should include the following:
- How you plan to educate employees on the company's code of ethics.
- How the company's core ethical values and principles should be integrated in the company's key operations including setting policy, strategic planning and decision-making.
- How your ethics program addresses your company's moral ecology. (Is it finance-, customer-, or quality driven? How do employees develop successful moral careers and modes of ethical advocacy within each of these companies? How does your ethics training program support this process?)

CSR Challenges

- Several companies have special challenges in CSR. For example, Coca Cola when operating in India finds itself sharing scarce water resources with local, subsistence farmers. What are their responsibilities in this context? Relate your CSR challenge to the STS description in the second section.
- Develop a response to this CSR challenge. How does this realize your company's key moral values?
- Contextualize your company's CSR response within a general CSR perspective: shareholder, stakeholder, alliance.

Recruitment and Leadership Strategies for Implementing Ethics

- In this section you will describe how you will realize your core objectives in recruiting new employees and in developing a leadership style.
- Consider, for example, how you will integrate values into the different components of your corporation's recruiting mechanism. Justice in the job description. Communicating to new employees their job and moral responsibilities. Recruiting employees who will be able to develop successful moral careers in the moral ecology of your company.
- Recognizing and responding to ethical risks such as maintaining privacy and property.

Conclusion

In the executive summary, you have told your reader what you are going to say in this report. The main body of the report contains what you need to say. This final section tells the reader what you have said by recapitulating and summarizing the report's high points. Include a time frame for implementing your ethics program as well as a description of the program's needs.

What did you learn?

Check List

- Each group will turn in this checklist, fully filled out and signed. Checking signifies that your group has completed and turned in the item checked. Failure to submit this form will cost your group 20 points
- ____Executive Summary
- _____Socio-Technical System Table and Written Explanation
- ____Code of Ethics
- ____Ethics Training Program
- ____Corporate Social Responsibility Challenge and Response
- _____Recruitment and Leadership Strategies for Implementing Ethics
- Conclusion

Group Self Evaluation Requirements

- Group Self-Evaluation Form including...
 ____ a list of the goals your group set for itself
 ____ a carefully prepared, justified, and documented assessment of your group's success in reaching these goals
 ____ a careful assessment of what you did and did not learn in this activity
 ____ a discussion of obstacles you encountered and the measures your group took to overcome these
 ____ a discussion of member participation and contribution including the member contriution forms
- ____ a general discussion of what worked and what did not work for you and your group in this activity

• ____Each member will turn in a filled out a Team Member Evaluation Form. This form can be accessed through the media file listed above. It is suggested that you do this anonomously by turning in your Team Member Evaluation Form in a sealed envelop with the rest of these materials. You are to evaluate yourself along with your teammates on the criteria mentioned in the form. Use the scale suggested in the form. Your first item here

Team Member Evaluation Form https://cnx.org/content/m18646/

This Team Member
Evaluation Form must be
filled out by each team
member. Evaluate yourself
and each member in terms
of the criteria. It is
preferable if you do this
anonymously.

Group Pledge

• I certify that these materials have been prepared by those who have signed below, and no one else. I certify that the above items have been checked and that those items with check marks indicate materials that we have turned in. I also certify that we have not plagiarized any material but have given due acknowledgment to all sources used. All who sign below and whose names are included on the title page of this report have participated fully in the preparation of this project and are equally and fully responsible for its results.

•	Member signature here
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Appendix

EAC ToolKit Project

This module is a WORK-IN-PROGRESS; the author(s) may update the content as needed. Others are welcome to use this module or create a new derived module. You can COLLABORATE to improve this module by providing suggestions and/or feedback on your experiences with this module.

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Funded by the National Science Foundation: "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF-SES-0551779

Three Views of CSR (Corporate Social Responsibility)

This module explores different models of CSR (corporate social responsibility) including a shareholder model (based on the arguments of Milton Friedman), the stakeholder model (based on the work of Evan and Freeman), and an alliance model advocated by Patricia Werhane. Students will develop a framework based on an exercise to determine a social contract between society and business. They will use this social contract to assess each CSR approaches. Then they will develop a CSR program for the hypothetical corporation, Burger Man. (Based on an exercise developed by Paul Thompson.) This module is being developed as a part of a project funded by the National Science Foundation, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF-SES-0551779. It is currently being used in the courses "Business, Society and Government" and "Corporate Leadership and Social Responsibility" being taught at the University of Puerto Rico at Mayaguez

Word Version of this Template https://cnx.org/content/m17318/

This is an example of an embedded link. (Go to "Files" tab to delete this file and replace it with your own files.)

- The first two links to this module are to sample corporate social responsibility statements put out by McDonalds and Starbucks. These will help you to benchmark your own efforts both in the fictional Burger Man case and in your efforts to develop CSR reports for real companies.
- The other link is a story from reporter, Paul Solomon, that reports on the annual Business for Social Responsibility conference. This story, first broadcast on December 23, 2004 reports on outstanding and successful efforts on CSR. Its title is "Good Business Deeds" and it was accessed for this module on August 17, 2008 at the following URL: http://www.pbs.org/newshour/bb/business/july-dec04/corporate_12-23.html

Introduction

This module will introduce you to the theme of corporate social responsibility. Three representative cases will help to pose the central problems and basic issues of CSR. Then you will work on developing a social contract between the business corporation and society to articulate the interests, goods, and rights at stake in CSR. Three different approaches dominate this field: the shareholder approach set forth by Milton Friedman, the stakeholder approach articulated by Evan and Freeman, and Patricia Werhane's alliance model. Finally, you will work on developing a CSR program for the hypothetical corporation, Burger Man. This will be based on a shareholder meeting that consists of six or seven stakeholder presentations. (You will play the role of one of the stakeholders.) Your CSR program will address and integrate the needs and interests of the Burger Man stakeholders.

Three CSR Challenges

Patricia Werhane discusses how six corporate organizations deal with three CSR challenges: (1) carrying out oil drilling in a corrupt political environment, (2) working with suppliers who impose sweatshop conditions on employees, and (3) addressing the HIV/AIDS challenge in Africa. Each challenge elicits two corporate responses, one from a shareholder or stakeholder perspective, the other from an alliance perspective. Shell Oil's response to political corruption in Nigeria will be compared with Exxon/Mobile's response in Chad and Cameroon. Nike's answer to public criticism of the employment practices of its third world suppliers will be compared to Wal Mart's reputedly heavy-handed treatment of its employees and suppliers. Finally, while the pharmaceutical industry has developed an expensive drug cocktail to treat HIV/AIDS in patients in developed nations, the NGO (Non Government Organization), the Female Health Company, has designed a program to distribute of condoms to

prevent infection in the first place. These paired corporate responses to CSR challenges are not provided in support of the position that the superiority of the alliance approach is a "no-brainer." Instead, they provide you with a menu of CSR strategies that you will evaluate using the CSR framework you will develop out of the social contract that between business and society. These three CSR challenges come from Werhane (2007)

Operating in a Corrupt Environment

- A big challenge facing multinational corporations is how they should respond to local corruption. Both Shell
 Oil and Exxon/Mobile sought to carry out drilling operations at sites plagued by corrupt local and national
 governments.
- Shell took a shareholder approach arguing that their primary CSR was to their stockholders and that involvement in corrupt local politics would be tantamount to paternalism.
- Exxon/Mobile, on the other hand, adopted a more active approach. They took expensive measures to mitigate the environmental impact of their operations. They also hired and provided technical training to local residents. Finally, they worked to ensure that the revenues they introduced into the local communities were not lost through political and business corruption.
- What are the CSRs of multinational corporations that operate in corrupt local environments? Are these fashioned around the minimal obligation of creating no additional harm? Or should they expand to preventing harm (if possible) that others are about to inflict? To move even further up the ladder of responsibility, do multinational corporations have positive, supererogatory responsibilities that consist of adding value to the communities they do business in?

Vicarious CSR: Responding to Supplier Sweatshops

- Vicarious responsibility occurs when one agent accepts responsibility for actions executed by another. For example, under agency theory, the principal bears overall moral and legal responsibility for the action since he or she has originated it. Although the agent executes the action, he or she is responsibility only for executing the action faithfully and treating the principal's interests as his or her own.
- In this context, can we hold corporations such as Nike and Wal Mart vicariously responsible for the morally questionable actions of their suppliers? If so, then under what conditions?
- Nike fell under siege when the press found out that its suppliers based in the third world imposed harsh, sweatshop conditions on their employees, including child labor. Nike could have argued that this was beyond the scope of their repsonsibility. How could **they** be held **vicariously responsible** for the actions of another? Their job was to produce shoes at the lowest possible price to deliver an affordable quality product to customers and to maximize shareholder value. But Nike went beyond this minimal responsibility to carefully vet suppliers and to work with them to improve working conditions. Thus, they expanded the scope of their CSR to include improving working conditions for, not only their employees, but also the employees of their suppliers.
- Wal Mart has been identified by Collins and Porras (Built to Last) as a highly successful and visionary company. It has certainly led the way in providing consumers with high quality products at surprisingly low prices. But the savings it provides to customers and the high returns it guarantees investors are purchased at a high price. Wal Mart prevents its employees from joining unions which has lowered their wages and restricted their health and retirement benefits. Wal Mart employees are also expected to work long hours for the company. While it provides cheap, high quality products to its customers, Wal Mart pushes suppliers narrowing their profit margin and placing upon them the responsibility of supplying product just-in-time to meet demand.
- In its earlier days, Wal Mart targeted small towns. Their competitive practices forced less aggressive, local business to leave. While they have brought considerable benefits to these communities, they have also seriously changed established business and social structures.
- Finally, Wal Mart, like Nike initially, exercises minimal supervision over their suppliers many of whom are
 oversees. Wal Mart suppliers also have been known to impose harsh working conditions on their employees.

Some CSR Questions for Nike and Wal Mart

1. From a broader CSR perspective, is Nike maximizing stakeholder value? Is it redistributing burdens and costs from customers and investors to its suppliers and their employees? Does CSR allow this redistribution of the corporate wealth form the shareholders to other stakeholders? (Think about Friedman's arguments here.

- 2. If it is necessary to trade off stakeholder stakes as both Wal Mart and Nike do, which trade off is more just? Nike's distribution of its wealth from its stockholders to the needy manifested in its efforts to improve the working conditions and income of the employees of its suppliers? Or Wal Mart's distribution of benefits to its stockholders and its comparatively prosperous customers?
- 3. Which model would Friedman prefer under the his version of the shareholder view of CSR? Explain and evaluate.
- 4. Which model would be preferable by Evan and Freeman under the stakeholder view? Who are Nike and Wal Mart's stakeholders? What are their stakes? How should the wealth produced by these two corporations be distributed among their stakeholders?
- 5. Werhane, in her alliance model, argues for the importance of a CSR model that decentralizes the corporation and facilitates morally imaginative solutions. Why does she argue that Nike's program is than Wal Mart's from this perspective? What could Wal Mart do to improve its CSR on the alliance view?

Facing the AIDS Challenge in Africa

- The widespread and devastating effects of the AIDS epidemic in Africa are well known. But what are the responsibilities of corporations in the face of this terrible CSR challenge? Should they do business as usual and allow others who are perhaps more qualified respond to this pervasive social problem? Or should they recognize a broader responsibility to channel their wealth, knowledge and expertise toward mitigating this social problem?
- Pharmaceutical corporations invest huge amounts of money in research and development. The market place is a good place for both encouraging this necessary risk and for distributing it among several groups and interests. Developing new medicines requires costly research. So Friedman's question is highly pertinent here: does imposing CSR on a corporation do more harm than good because it interferes with the delicate mechanism of the market?
- At any point along the way, the product may not meet expectations, a competitor may beat the pharmaceutical
 to the market, the regulatory process may delay or even prevent sale, and so on. The rewards from patenting a
 successful medicine are astoundingly high. But heavy, possibly devastating losses are also possible. Adding
 CSR to the mixture may be the formula for corporate disaster.
- Pharmaceutical corporations also face daunting challenges from regulatory agencies such as the Food and Drug Administration. New products must be exhaustively and painstakingly tested to avoid problems that have arisen in the past such as the Dalkon Shield and Thalidomide. Again, considerable effort must be expended in exploring the middle and long term consequences accompanying product and drug use, and all of this before the product can be marketed and profits made. Government regulation also raises another problem. Is government prodding necessary to force corporations into a proper CSR posture? Or should corporations be allowed to develop voluntarily their own CSR responses?
- In the case at hand, pharmaceutical companies have invested considerable resources to carry out research into medicines that control HIV infection and prevent it from developing into full-blown AIDS. But these treatments are very expensive and bring with them considerable side effects. An anti-AIDS chemical cocktail can cost patients in developed nations between 15 and 20 thousand dollars per patient per year. This is far beyond the financial resources available to a typical HIV/AIDS patient in Africa. Some NGOs and critics of the pharmaceutical industry accuse the latter of gouging victims and drawing excess profits from the misfortune of others. A spokesperson for "Doctors Without Borders," for example, claims that the AIDS treatment "cocktail" that costs U.S. patients 15 to 20 thousand dollars could be made available to Africans at less than 300 dollars per patient per year. Pharmaceuticals, according to their critics, need to rethink their CSR, cease operating as for-profit businesses, and make these drugs available to third world sufferers at cost.
- What are the CSRs of multinational pharmaceutical corporations for making HIV/AIDS drugs available to victims in the poverty-stricken nations of Africa? Are they responsible for charging what the market will bear? Assuming they have the right to recoup their heavy investment in research, should governments, recognizing the necessity of compensating drug companies for their research, buy these drugs and redistribute them at little or no cost to those who can't afford them? Or should the pharmaceuticals charge more to those who can pay and less to those who cannot? (This redistributes the burden of cost from the haves to the have nots.)
- Many NGOs have taken the stance that their responsibility lies in pressuring drug companies to do the right thing and donate medicines to patients who cannot pay. This is their corporate social responsibility, and the pharmaceutical industry certainly has enough money to do this.

- But others have tried to reframe this issue using moral imagination. Treating individuals for HIV infection once they have contracted it is expensive no matter how you look at it. But, redefining the problem, can moderate and affordable measures be taken to prevent the spread of the disease?
- This is the imaginative approach taken by the Female Health Company which has initiated a widespread effort to distribute condoms to those at risk for contracting AIDS.
- How does the approach of the FHO exemplify Werhane's alliance model? How should pharmaceutical companies respond to this kind of initiative? Is it necessary to frame the relation between the pharmaceutical industry and NGOs as an adversarial relation or should broader alliances be formed that coordinate the efforts of these groups?

The Social Contract between Business and Society

Every contract is built on the basis of three conditions (1) free and informed consent, (2) a quid pro quo, and (3) the rational self interest of the contracting parties.

- Free and Informed Consent: No contract is legitimate that is based on force, fraud or deception. The parties must enter into this agreement freely and without compulsion. They must understand the terms of the contract which excludes deception and fraud. In short, the contract presupposes the uncoerced participation of all the parties. To enter into the contract they must understand all the key issues and consent to the constitutive exchange.
- **Quid Pro Quo**: Quid Pro Quo literally means something in exchange for something. Every contract is built around a mutually beneficial exchange. I give you my baseball cap in exchange your ice cream. Most exchanges are simultaneous. But some are what Hobbes calls "covenants." Here I give you my baseball cap with the understanding that later this afternoon you will pass by your refrigerator, get my ice cream cone and give it to me. I give you my part now and trust you to carry out your part later.
- **Rational Self Interest**: Each of us should know the value of the items to be exchanged. (That is one reason why a contract requires free and informed consent.) This knowledge is determined, in part, by the preference schedules that we have developed as rationally self-interested beings. So a legitimate contract assumes that I have interests, that I am capable of determining what promotes these interests, and that I am rational enough to determine means to promote them and avoid other means that interfere with them.

Social Contracts

A social contract differs from other contracts because it is hypothetical. Business and Society have never sat down in a room and hammered out a contract outlining their relation. But this hypothetical contract provides a good means of making sense out of the relation that has gradually evolved between society and business. Forget for a moment the historical details of the relation between business and society. If this relation is summarized as a contract, what does society give to business? What does business give to society? Do these two institutions trust one another or do they each adopt means to monitor and control the other? What are these means? Treating the relation between business and society as a contract between two mutually consenting agents or actors does get some of the facts wrong. But it provides a useful "heuristic" device, i.e., a framework that will help us to summarize, structure, and, in a work, make sense of the relation between the two. Moving from the terms of this "contract" you will be able to develop a framework for understanding the social responsibilities of business corporations. This, in turn, will help you to understand the CSR challenges presented above and the CSRs of the fictional but realistic Burger Man corporation.

Exercise 1: In small groups, spell out the social contract between society and business.

- How can the absence of force, deception, and fraud be guaranteed in this contract? How should each side hold the other accountable? (This is especially the case where one side delivers at one time and the other side is trusted to deliver later.)
- What benefits can business bring to society? How can society benefit business. Develop a table with one column listing what business has to contribute to society and the other what society has to contribute to business. This table is the heart of your social contract.
- Assume that society and business are rationally self interested. How does this effect the formulation of the goods of the exchange? How does this enforce the terms of the contract? Are these self interests divergent? (Then each side must monitor the other to prevent the corruption of the contract.) Are these interests

- convergent? (Then the contract consists largely in building social capital and trust between the contracting parties.)
- Donaldson, 1993 uses social contract theory to account for the rights and duties of multinational corporations

Exercise 2: CSR and STS

Choose one of the CSR challenges above and construct a socio-technical table around it

Component / Embedded Value	Technology (Hardware)	Technology (Software)	Physical Surroundings	Stakeholders	Procedures	La
Justice						
Free Speech						
Property						
Privacy						
Safety						

STS Table

Three CSR Frameworks

Shareholder View

From Milton Friedman, "The Social Responsibility of Business is to Increase Its Profits." "But the doctrine of "social responsibility" taken seriously would extend the scope of the political mechanism to every human activity. It does not differ in philosophy from the most explicitly collectivist doctrine. It differs only by professing to believe that collectivist ends can be attained without collectivist means. That is why, in my book **Capitalism and Freedom**, I have called it a "fundamentally subversive doctrine" in a free society, and have said that in such a society, "there is one and only one social responsibility of business--to use its resources and engage in activities designed to increase its profits so long as it stays wihtin the rules of the game, which is to say, engages in open and free competition without deception or fraud." 1970 by New York Times Company

Stakeholder View

- A stakeholder must be distinguished from a stockholder. The latter owns a share of the corporation. On the other hand, a stakeholder is any group or individual that has a vital interest in the doings of the corporation. Hence the stockholder is a stakeholder of the corporation whose vital interest at play is the share owned of the corporation and the money invested in this share.
- There are several other stakeholders of the corporation. These include (1) employees, (2) customers, (3) suppliers, (4) local community, (4) surrounding governments, (5) the surrounding human and natural environment, and (6) the corporation's managers. (In some situations there are other stakeholders such as competitors.)
- Stakeholder theory requires that the corporation recognize and respect the vital interests of each of its surrounding stakeholders. This frequently issues in proposing stakeholder rights and assigning to others correlative duties to recognize and respect these rights.
- Stakeholder theory also requires that the corporation integrate interests where possible, mediate or broker
 conflicts between interests, and only trade off competing interests when absolutely necessary and when more

conciliatory efforts have already been made and have failed.

• See Evan and Freeman 1988

Werhane's Alliance Approach

- Werhane's alliance approach is similar to the stakeholder approach in that it recognizes several groups that surround the corporation and have vital interests that depend on the doings of the corporation. These surrounding groups are more or less the same as those in the stakeholder approach: owners, managers, employees, customers, suppliers, local communities, governments, the environment, etc.
- But Werhane makes two significant departures from the stakeholder approach. First, she uses moral
 imagination to distance the corporation from the problem solving process; the lens of problem solving
 refocuses on each of the other stakeholders. Whereas for stakeholder theory the corporation is the center of
 analysis and is visualized as surrounded by its stakeholders, the alliance approach decentralizes the
 corporation and alternatively visualizes each stakeholder as the center for the purpose of framing problems
 and generating solutions.
- Second, the alliance approach sees the corporation as a part of a system of interrelated and interdependent
 parts. Hence, each problem situation presents a system formed of the corporation, owners, managers,
 employees, suppliers, customers, local communities, and governments. Problems emerge from value conflicts
 within and between the constituent parts of the system. They are solved through the cooperation of the
 different constituencies of the alliance.
- While this approach does not lend itself to algorithms or rules, it does promise solutions by highlighting and
 facilitating moral imagination both in the framing of problems (problems are posed in terms of framings from
 multiple perspectives) and in terms of the generation of solutions (multiple problem-framings help us to
 visualize new solution horizons).
- See Werhane, 2007 and 2008.

What you will do ...

Module Activities

- 1. Examine the CSR challenges presented above. Compare the two responses to each challenge.
- 2. Learn about three models of corporate social responsibility.
- 3. Develop a fully articulated social contract between business and society. Use this contract to understand the basic CSRs of business corporations.
- 4. Prepare a Social Impact Analysis on the fictional firm, Burger Man.
- 5. Prepare for and participate in a board meeting for Burger Man to examine ethically its practices and develop for it a viable and sustainable program of corporate social responsibility. This requires that you give a short presentation on the interests of a particular Burger Man stakeholder
- 6. Develop a full blown CSR program for Burger Man that carries out the responsibilities of this company to its stakeholders.

Burger Man Stakeholders

The author became aware of the Burger Man exercise when participating in an Ag-Sat broadcast course in Agricultural Ethics in 1992. The exercise was created by the leader of the course, Dr. Paul Thompson.

Burger Man Profile

Burger Man is a franchise that began by selling the fast food staples of hamburgers, french fries, and milk shakes. As the company has matured and faced other competitors in this market niche, it has, of course, developed a more sophisticated set of products and services. But it has also been challenged on various issues related to corporate social responsibility. Groups representing the rights and interests of animals have criticized the agribusiness methods used by its suppliers. Recently, public interest groups have blamed Burger Man and its competitors for encouraging unhealthy dietary habits among its customers and the public in general. Shareholders, of course, are concerned that the company continue to be profitable and provide them with a good return on investment. Governmental regulatory agencies such as the EPA (Environmental Protection Agency) and OSHA (Occupational Safety and Health Administration) wish to hold Burger Man accountable for conforming to its regulations. In short

there are several stakeholder groups surrounding this corporation, each vying for its particular interest. In this exercise, you will play two roles. First you will be assigned a role as one of Burger Man's stakeholders and make a presentation of your group's interest in mock shareholder meeting that will be held in class. Then you will switch to the role of Burger Man management. Here your assignment will be to articulate the different stakeholder interests and integrate them into a coherent CSR plan for your company.

Burger Man Customers

- Burger Man customers are the consumers who go to its restaurant and enjoy its food services. In preparing your board meeting presentation you need to explore Burger Man's social responsibilities to its customers.
- Are these reducible to providing them an enjoyable product at a reasonable price? Or does BM's social responsibilities go beyond this?
- Burger Man has extensive interactions with its suppliers that include meat packing corporations and agribusiness concerns. How should Burger Man choose its suppliers? How carefully should it monitor their activities. To what extent is Burger Man responsible for the untoward activities of these groups?
- How responsible is Burger Man for shaping the dietary habits of its customers? Does it bear responsibility for the health problems that its public develops from bad dietary practices?

Burger Man Shareholders

- Burger Man shareholders are investors who have purchased shares of Burger Man's publicly traded stock.
- What are their stakes?
- What are their responsibilities? For example, how closely should shareholders monitor the actions of their agents, i.e., Burger Man's managers? Are shareholders responsible for holding Burger Man to certain standards of corporate social responsibility? What are these standards and how do they stand in relation to the different models of social responsibility?
- Prepare your presentation around these issues. Address shareholder interests (stakes) and responsibilities.

Burger Man Managers

- Burger Man managers are the agents of the shareholders/owners responsible for overseeing the day-to-day operations of the corporation.
- What are the manager's stakes? What role do they play in the different models of social responsibility? (Classical, stakeholder, and alliance views?)
- Agency theory argues that the primary corporate governance problem is overseeing and controlling the actions of managers. How closely should shareholders and their board of directors oversee corporate managers? Are managers self-interested agents or stewards of the corporation?
- What are managerial responsibilities vis a vis corporate social responsibility? Should they uncover illegal actions? Should they implement an audit process that assess the corporation's success in carrying out its social responsibilities? Should these responsibilities go beyond the legal minimum?
- Should managers go beyond the legal minimum in monitoring and carrying out corporate social responsibilities?
- Are corporate managers responsible only to shareholders or do their responsibilities extend to other stakeholders? If the latter, how do they balance conflicting stakes?
- Structure your presentation around outlining managerial stakes and roles. Choose a model of corporate social responsibility and argue for its appropriateness to Burger Man.

Government Regulatory Agencies: OSHA and EPA

- OSHA is in charge of regulating workplace safety. EPA is in charge of setting, monitoring, and enforcing standards concerning the environment. (For example, they establish acceptable air emission and water discharge standards.)
- What are the stakes of government regulatory agencies? What is their role in the context of the Burger Man corporation?
- Write your position paper outlining your group's stakes and roles in the context of establishing Burger Man's corporate social responsibility procedures. What would you recommend? How should you back up or enforce these recommendations?

Animal Rights Activists

- Burger Man serves hamburgers, chicken sandwiches, and dairy products. These involve animals. As animal rights activists, you are concerned with steering Burger Man and its suppliers toward morally acceptable treatment of animals.
- What are your group's stakes in this board meeting? What kind of role should you play?
- State your policy on animal treatment? Is it a position of animal welfare based on utilitarian considerations? (Peter Singer provides such a position.) Is it a deontological position based on the assertion of animal rights that impose correlative duties on humans? (Tom Regan takes this position.) Or should you base your arguments on anthropocentric issues such as human health?
- Write a position paper that responds to these questions for presentation in the Burger Man board meeting.

Town X Committee for Economic Development

- Your town, Town X, has three Burger Man franchises. Representatives from the town council are participating in the board meeting in order to ensure that Burger Man's policies on corporate social responsibility enhance the town's economic welfare and development.
- What are your stakes? What are your roles and responsibilities?
- What kind of services and products do you provide for Burger Man? What benefits do your community draw from Burger Man? How can Burger Man activities and policies promote or demote your town's interests and stakes?
- Develop a position paper for the board meeting that addresses these issues? Pay special attention to the goods and risks that your town exchanges with Burger Man.

Insert paragraph text here.

Exercises in CSR

- Participate in the Burger Man Stakeholder Meeting
- Take your assigned stakeholder group and prepare a short presentation(five minutes maximum) on your stakeholder's interests, rights, needs, and vulnerabilities.
- Listen to the stakeholder presentations from the other groups. Try to avoid a competitive stance. Instead, look for commonalities and shared interests. You may want to form coalitions with one or more of the other groups.
- Switch from the stakeholder role to that of Burger Man management. You are responsible for developing a comprehensive corporate social responsibility program for Burger Man. You job is to integrate the concerns expressed by the stakeholders in their presentation and form your plan around this integration.
- Try to resolve conflicts. If you cannot and are forced to prioritize, then you still must find a way of
 recognizing and responding to each legitimate stakeholder stake. You may want to refer to the "Ethics of
 Team Work" module (m13760) to look for time-tested methods for dealing with difficult to reconcile stake.
 These include setting quotas, negotiating interests, expanding the pie, nonspecific compensation, logrolling,
 cost-cutting and bridging. You should be able to establish beyond a shadow of a doubt that you have made
 every attempt to recognize and integrate every legitimate stakeholder stake.

What did you learn?

This module and two others (A Short History of the Corporation and Corporate Governance) are designed to help you understand the corporate context of business. In this section, you should reflect on three questions: (1) What have you learned about the social responsibilities of corporations? (2) What still perplexes you about the social responsibilities of corporations. (3) Do you find one model of CSR better than the others? (4) Can these models of CSR be combined in any way?

Appendix

Rubric for Partial Exam on CSR https://cnx.org/content/m17318/

This file contains the rubric to be used on the partial exam for Corporate Leadership and Social Responsibility, ADMI 3405, Fall 2008"

Corporate Social Responsibility Frameworks: Seminal Papers

- 1. Friedman, M. (1970) "The Social Responsibility of Business Is to Increase Its Profits," in **New York Times Magazine**, September 13, 1970.
- 2. Evan, W.M. and Freeman, E. (1988) Ä Stakeholder Theory of the Modern Corporation: Kantian Capitalism" in Beauchamp and Bowie 1988.
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- 4. See Werhane 2007 and 2008 below

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- 1. Collins, J.C., Porras, J. I. (1994) **Built To Last: Successful Habits of Visionary Companies**. New York: Harper Collins Publishers.
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A Short History of the Corporation

This module explores the history of business corporations. It provides background information useful for a unit or course on business government and society, business ethics, and corporate governance. The corporation is presented as the practical solution to a series of related historical problems such as providing for orderly transfer of property, pooling capital, and spreading financial risk. This module has been developed as a part of a project funded by the National Science Foundation, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF-SES-0551779.

Note:

Word Version of this Template https://cnx.org/content/m17314/

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Introduction

In this module you will learn about the history of corporations. Antecedants of the modern corporation can be found in the Middle Ages, the Renaissance, and in the Industrial Revolution in Great Britain and the United States. Corporations have evolved into their present form as the synthesis of discrete solutions to specific historical problems that have arisen in the practice of business. This module has been designed for courses in (1) business, society, and government, (2) business ethics, (3) corporate governance, and (4) corporate social responsibility.

What you need to know ...

The History of the Corporation

This historical process has produced five functions that characterize the modern corporation. Corporations have emerged as...

- 1. "Passive devices" that hold property
- 2. Structures designed to exert monopoly control over and regulate a domain of specialized knowledge and skill
- 3. Means designed to pool capital and resources including human resources
- 4. A legal shield that protects owners and investors from liability and helps to spread and distribute financial, moral, and legal risk
- 5. Organizational decision-making structures that subordinate and synthesize the actions of human agents to bring about collective goals such as building a railroad, designing and manufacturing automobiles, and pursuing legitimate business ventures.

Passive Devices that hold property

When the abbot of a medieval monastery died, public officials had difficulty determining to whom its property, wealth, and resources passed. While this is hard to conceptualize from a modern standpoint, during the Middle Ages, no legal distinction could be made between (1) managing property owned by others, (2) exercising

stewardship over property owned by others, and (3) owning property. Moreover, the concept and practice of owning property is complex. "Property" in its modern sense has been spelled out as a bundle of distinct rights including "the right to possess, control, use, benefit from, dispose of and exclude others from the property." (DesJardins: 37) These distinct rights are not given as entailments of a natural concept of property but represent legally endowed capacities designed to respond to specific practical problems. So, to return to the problem created by the death of the abbot, a legal entity (called the church) was created and endowed with the one of the bundled rights accompanying the notion of property, namely, the right to possess and hold property (Stone 1974: 11)

Structures that exert monopoly control and regulate a domain of specialized

Those familiar with European history know that the university came from student guilds. Students banded together to hire noted scholars willing to teach their research. Other guilds were formed around practical occupations as butchering or shoe making. Eventually, guilds evolved to address a series of practical problems: (1) how to educate individuals concerning the skills and knowledge required by the practice, (2) how to identify those responsible for the improper practice of the craft, (3) how to control who could and could not participate in (and profit from) the craft, and (4) how to regulate the craft to promote the interests of its practitioners and its beneficiaries or clients. Guilds became responsible for controlling the privileges of a trade, establishing rules and standards of practice, and holding courts to adjudicate grievances between participants. (Stone: 11-13)

A set of means specially designed to pool capital and resources including human resources.

As business ventures became more ambitious, their successful execution required raising considerable funds and capital along with the coordination of the activities of diverse human agents. Organizational structures were created slowly over time to raise money, acquire capital, and manage these complex ventures. This included creating roles that were coordinated through complex organizational systems. The distinction between the **owner** and **manager** functions, so crucial to the structure of the modern corporation, emerged slowly during this period. Owners provided money and capital and determined the overall goals pursued by the organization. Managers carried out administrative tasks concerned with day to day operations; their moral and legal duty was to remain faithful to the aims and interests of the owners. Unchartered joint stock companies served as proto-corporations that generated capital, protected monopolies of trade and craft, and managed complex ventures such as importing spices and tea from the Orient. As these structures evolved, they increasingly embodied the important distinction between the ownership and management functions.

Providing a legal shield to limit owner and operator liability

Scandals in 18th century Great Britain revealed another set of problems besetting the emerging corporation. When the unchartered joint stock company, the South Sea Company, went bankrupt, all the investors and owners found themselves responsible for covering the huge debt created when risky investments and questionable ventures went sour. This debt went well beyond resources of the investors destroying their personal fortunes and placing many of them in debtor's prison. (This and other fiascoes were dramatized by Charles Dickens in his novel, **Little Dorrit**.) The specter of unlimited liability scared off potential investors and set back the development of the corporation. It became necessary to endow joint stock companies with powers and devices that limited and distributed financial, moral, and legal risk. (Both owners and managers required protection although in different ways.) Individuals would invest in joint stock companies only when the associated risks became manageable and widely distributed.

Organizational structure that subordinate and synthesize the actions of human agents

Negatively, the development of the modern corporation was facilitated by creating a shield that limited the liability of owners and managers. Liability for owners was limited legally to the amount invested. Liability for managers required proving that they failed to remain faithful to the interests of the stockholders, the principals or originators of their actions. This broke down into demonstrating failure to exercise "sound business judgment" by, among

other things, allowing outside, competing interests to corrupt their business judgment. **Positively**, the corporation emerged out of a series of legal innovations designed to establish and then control the collective power of corporate organizations. Complex organizational structures were created that designed differentiated roles filled by employees. These structures served to channel the activities of employees toward corporate ends. The investor role stabilized into that of **stockholders** who owned or held shares of the corporation. To promote their interests and to establish the cardinal or fundamental objectives of the corporation, the stockholders elected representatives to serve on a board of directors. The directors then appointed managers responsible for running the corporation and realizing the interests and objectives of the stockholders. Managers, in turn, hired and supervised employees who executed the company's day to day operations (**line** employees) and provided expert advice (**staff** employees). These roles (and the individuals who occupied them) were related to one another through complex decision-making hierarchies. Davis (1999) in his discussion of the Hitachi Report shows how many modern companies have dropped or deemphasized the staff-line distinction. Others (Stone, Nader) cite instances where managers have become so powerful that they have supplanted the directorial role. (They hand pick the directors and carefully filter the information made available to stockholders.) But these two distinctions (Staff v. line and owner v. operator) remain essential for understanding and classifying modern corporations. (See Fisse, Stone, and Nader.)

Profile of the Modern Corporation

Corporations became full blown legal persons. They acquired **legal standing** (can sue and be sued), have been endowed with **legal rights** (due process, equal protection, and free speech), and have acquired **legal duties** (such as tax liabilities). (See table below for the common law decisions through which these corporate powers and rights have been established.) The powers of the corporation were regulated by the state through founding charters which served roughly the same function for a corporation as a constitution did for a state. Initially, charters limited corporate powers to specific economic activities. Railroad companies, for example, had charters that restricted their legitimate operations to building and operating railroads. When they sought to expand their operations to other activities they had to relate these to the powers authorized in the founding charter. If a charter did not specifically allow an operation or function, then it was literally **ultra vires**, i.e., beyond the power of the corporation (Stone: 21-22). This method of control gradually disappeared as states, competing to attract business concerns to incorporate within their boarders, began to loosen charter restrictions and broaden legitimate corporate powers in a process called "charter mongering." Eventually charters defined the legitimate powers of corporations so broadly that they ceased to be effective regulatory vehicles.

Given this vacuum, governments have had to resort to other measures to control and direct corporations toward the public good. The practice of punishment, effective in controlling human behavior, was extended to corporations. But Baron Thurlow (a British legal theorist) framed the central dilemma in corporate punishment with his oft quoted comment that corporations cannot be punished because they have "no soul to damn" and "no body to kick." The unique attributes of corporations has given rise to creative options for corporate control and punishment: fining, stock dilution, court-mandated changes in corporate structure, adverse publicity orders, and community service. (See Fisse) Most recently, Federal Sentencing Guidelines have sought to provide incentives for corporations to take preventive measures to avoid wrongdoing by developing ethics compliance programs. These guidelines adjust punishments in light of ethics programs that the corporations have designed and implemented to prevent wrongdoing. Corporations found guilty of wrongdoing would still be punished. But punishments can be reduced when guilty corporations show that they have developed and implemented compliance programs to promote organizational ethics and to prevent corporate wroingdoing. These include compliance codes, ethics training programs, ethics risk identification measures, and corporate ethical audits.

Problem	Solution	Organizational Form
Successfully	Create a "passive device to hold property"	Proto-corporation

transferring stewardship over church holdings to new abbot		
Control over and regulation of a practice or skill	Create a device to (a) hold the privileges of some particular trade, (b) establish rules and regulations for commerce, and (c) hold courts to adjudicate grievances among members.	Medieval guilds that evolve into regulated companies.
Pooling capital and resources and directing complex ventures	Create a device (a) to hold provileges of trade, (b) where investors provide capital, and (c) that delegates operations to managers	Unchartered joint stock companies
Limiting investor liability, limiting manager liability, and balancing the two	Corporation evolves into a legal person with (a) legal rights and duties, (b) owned by shareholders, (c) run by managers, (d) regulated through state charter	Limited corporation whose operations are defined in and limited by the charter
Ultra Vires (charter prevents growth) and Charter Mongering	Granted broad powers through more broadly defined charters	Full Blown Corporation
Finding agent responsible for wrongdoing	(a) Due process, equal protection, and free speech rights, (b) legal duties, (c) legal standing, (d) Federal Sentencing Guidelines, and Sarbanes-Oxley Act	Corporation as Legal Person

History of CorporationModified from Christopher Stone, Where the Law Ends

	Description	Example	Target of Punishment	Deterrence Trap Avoided?	Non- financial Values Addressed?
Monetary Exaction	Fines	Pentagon Procurement Scandals	Harms innocent	Fails to Escape	Few or None Targeted
Stock Dilution	Dilute Stock and award to victim		Stockholders (Not necessarily guilty)	Escapes by attacking future earnings	Few or None
Probation	Court orders internal changes (special board appointments)	SEC Voluntary Disclosure Program	Corporation and its Members	Escapes since it mandates organizational changes	Focuses on management and subgroup values

Court Ordered Adverse Publicity	Court orders corporation to publicize crime	English Bread Acts (Hester Prynne shame in Scarlet Letter)	Targets corporate image	Escapes (although adverse publicity indirectly attacks financial values)	Loss of prestige / Corporate shame / Loss of Face/Honor
Community Service Orders	Corporation performs services mandated by court	Allied chemical (James River Pollution)	Representative groups/individuals from corporation	Escapes since targets non- financial values	Adds value to community

Options for Corporate Punishment (Fisse and French)

Citation for Table

This table provides a close summary of Fisse, B. (1985). "Sanctions Against Corporations: The Limitations of Fines and the Enterprise of Creating Alternatives" in **Corrigible Corporations and Unruly Law**, editors Brent Fisse and Peter A. French. San Antonio, TX: Trinity University Press, 137-157. Summary in tabular form of the taxonomy developed by Fisse to classify and compare forms of corporate punishment.

Requirements of Sarbanes-Oxley (Summarized by Dyrud: 37)

- Provide increased protection for whistle-blowers
- · Adhere to an established code of ethics or explain reasons for non-compliance
- Engage in "full, fair, timely and understandable disclosure"
- Maintain"honest and ethical" behavior.
- · Report ethics violations promptly
- Comply with "applicable governmental laws, rules, and regulations"
- Dyurd cites: ELT, **Ethics and Code of Conduct**, n.d.; http://www.elt-inc.com/solution/ethics _and_code_of_conduct_training_obligations.html

Amended Federal Sentencing Guidelines (Taken from Dyrud: 37)

- 1. Establishing standards and procedures to prevent and detect criminal conduct
- 2. Promoting responsibility at all levels of the program, together with adequate program resources and authority for its managers
- 3. Exercising due diligence in hiring and assigning personnel to positions with substantial authority
- 4. Communicating standards and procedures, including a specific requirement for training at all levels
- 5. Monitoring, auditing, and non-internal guidance/reporting systems
- 6. Promiting and enforcing of compliance and ethical conduct
- 7. Taking reasonable steps to respond appropriately and prevent further misconduct in detecting a violation

Legal Trail Toward Corporate Moral Personhood: A Table Summary

Date	Decision	Legal Right Affirmed
1889	Minneapolis and St. L. R. Co. v. Beckwith	Right for judicial review on state legislation
1893	Noble v. Union River Logging R. Col,	Right for judicial review for rights infringement by federal legislation
1906	Hale v. Henkel	Protection "against unreasonable searches and seizures (4th)
1908	Armour Packing C. v. United States	Right to trial by jury (6th)
1922	Pennsylvania Coal Co. V. Mahon	Right to compensation for government takings
1962	Fong Foo v. United States	Right to freedom from double jeopardy (5th)
1970	Ross v. Bernhard	Right to trial by jury in civil case (7th)
1976	Virginia Pharmacy Board v. Virginia Consumer Council)	Right to free speech for purely commercial speech (1st)
1978	First National Bank of Boston v. Bellotti	Right to corporate political speech (1st)
1986	Pacific Gas and Electric Company v. Public Utility Commn of California	Right against coerced speech (1st)

From Ritz, Dean. (2007) "Can Corporate Personhood Be Socially Responsible?" in eds. May, S., Cheney, G., and Roper, J., Oxford, UK: Oxford University Press: 194-195.

What you will do ...

Exercise One: Other People's Money

Watch the shareholder's meeting in the movie, "Other People's Money." Then answer the questions below. Think generally about what the manager of a corporation should do with the money its stakeholders have invested in it.

- What is Larry the Liquidator's basic argument? What is Andrew Jorgensen's basic argument?
- What is Larry the Liquidator's conception of the nature and value of the corporation? What is Andrew Jorgensen's conception of the nature and value of the corporation?
- What is the social responsibility of a corporation according to Larry the Liquidator? What is it according to Andrew Jorgensen?
- Write a paragraph on which argument you find most persuasive, that of Larry or that of Andrew. Explain why you find it persuasive.

Exercise Two: How to punish Arthur Andersen

Watch the documentary, "The Smartest Guys in the Room," paying special attention to the role played in the Enron fiasco by the accounting firm, Arthur Andersen. Then answer the following questions.

- How important should AA's former, excellent reputation have been in determining how to punish it in the role it played in the Enron case? Explain your answer.
- Enron was only the last of a series of ethics scandals that AA had fallen into. How should it have adjusted to prior scandals? (Are the Federal Sentencing Guidelines of any help here?)
- Consider that Sarbanes-Oxley was passed largely in response to Enron. Do its provisions go far enough to prevent future Enrons? Do they go too far?.
- Using the table that summarizes punishment options provided by French and Fisse, how would you construct
 a punishment for Arthur Andersen? Who should be targeted? Should the company's black box be left alone?
 Is it better to attack financial or non-financial values? Should Arthur Andersen and other corporate offenders
 be encouraged to reform themselves or should those reforms be designed and directed from the outside?

Exercise Three: Group CID Structure

Corporate Internal Decision Structures

Creating Corporate Responsibility and Agency by Re-Description from CIDS

CID Structure licenses (permits) a re-description of a human action as a corporate action if it can be directly related to all elements of the corporation's Internal Decision Structure.

Thus X (an action performed by an individual) can be re-described as Y (a corporate action) if...

- 1. It carries out a corporate policy as outlined in the charter, mission statement, or values statement
- 2. Takes place in accordance with a decision recognition rule
- 3. Is performed as a part of carrying out a corporate role
- 4. And this role has a clear and designated location in the corporate flow chart

Your Challenge

- Outline your group's Internal Decision Structure
- Create a Group Internal Decision Structure

Answer these questions

- What are your group **goals**? What have you do so far to realize these?
- What rules help us to recognize a decision as belonging to your group? Procedure for realizing value of
 iustice
- What group **role(s)** are you playing? Leader, spokesperson, mediator, secretary/documentor, devil's advocate, motivator, conscience.
- What is your organizational **flow-chart**? Horizontally or vertically organized?
- How are your roles coordinated and synthesized? What procedures subordinate your individual actions under group intentions?

Review and update your preliminary group self-evaluation for Ethics of Teamwork

- **Goals**: What are your value goals for the semester?
- **Recognition rules and procedures**: What rules and procedures signal when you are acting for your group? (When are you subordinating individual interest to group interest?)
- Roles: Leader, spokesperson, mediator, secretary/ documentor, devil's advocate, motivator, conscience
- Flow chart or management system: How do you coordinate different individuals and their roles?

Your specific assignment...Build a group internal decision-making structure

1. **Finalize your goals**: (a) Identify and test procedures that help to recognize actions of your group's members as group actions. (b) Identify and distribute the roles that individuals are playing in your group. (c) Discuss how you have organized your group to tackle assignments. How do you synthesize and subordinate individual actions and decisions into group actions and decisions?

- 2. **Draw a picture of your group's GID/CID Structure:** Organize it as a flow chart that describes the progression from a class assignment to the final group product.
- 3. How does your group collect disseminated knowledge and skill from your individual members?
- 4. What is the greatest challenge you have faced so far?: How did your group respond? Was it effective, successful, or satisfactory?
- 5. Changes. Have you kept your goals and procedures "in tact" as you have faced these?

What did you learn?

Peter French speculates on the possibility that a corporation could consist of nothing more than a sophisticated software program. He also holds forth the notion of corporate moral personhood (as opposed to natural personhood). Now that you have had an opportunity to study the history of and structure of the modern corporation, what do you think about the nature of corporations?

Appendix

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Jeopardy for Corporations

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Responsible Choice for Appropriate Technology

This module explores cases studies of responsible choice of appropriate technologies for a variety of communities including communities in developing nations. This first version is incomplete and is being published to gain further reaction from students and faculty. It has been prepared in conjunction with the University of Puerto Rico at Mayaguez NSF project, GREAT IDEA.

I. Introduction

The goal of this module is to help you to think about technology in a different way. We tend to think of technologies as value-neutral tools not good by themselves but only in terms of the uses we put them to. The moral value of the hammer depends on the user and use. It can push nails into wood to build a house or hit someone on the head expressing unjustified anger and aggression against another.

But technologies are more than just value neutral tools. They are enacted in different worlds characterized by our activities, projects, institutions, cultures, and physical environments. At times they become extensions of our hands and feet and are called prosthetics. At other times, when they fail to fulfill the functions we have assigned them, they become obstacles that thwart or oppose our desires. (In the hands of the carpenter, the hammer pounds nails quickly and flawlessly into roof tile while the inexperienced home improver finds it a clumsy tool that bends nails.) Wanda Orlikowski encourages us to think of technologies less as external objects and more as enactments. She presents a case study that shows how a word processing program takes on four very different value colorings as it is enacted in each of four different socio-technical systems. This module is designed to help you to visualize how technologies that shape, magnify, extend, and constrain human activity. (See Orlikowski below.)

Some other goals

In this module you will...

• examine cases where a community exercises technological choice

- practice socio-technical sensitivity by describing the socio-technical system that underlies your group's case
- learn frameworks that guide the choice of appropriate technology
- develop an active understanding of how technologies form one environment alongside other environments that shape, enable, magnify, circumscribe, and constrain human action

II. What you need to know.

Responsibility in the context of technological choice.

Herbert Fingarette in the Meaning of Criminal Insanity (see below) characterizes moral responsibility as (moral) response to (moral) relevance. This means responsibility is a skill that combines two components. First one exercises techno-social sensitivity to uncover those aspects of a situation that have moral relevance. To a person sitting on a crowded bus, of all the things going on, the fact that an older man is awkwardly standing, uncomfortable and holding several boxes, is morally relevant. Picking this out of a complex situation draws upon a sophisticated set of emotional, cognitive, and perceptual skills. Second, having focused on what is morally relevant in a situation, a responsible agent then sets about devising action that is responsive to this relevance. The individual on the crowded bus, in response to the relevance of the man awkwardly standing, stands up and offers him a seat. Socio-technical System description and analysis provide a formal way of uncovering moral relevance in a concrete situation. This module will give you an opportunity to practice this skill. The value realization framework laid out in this module(see Flanagan, Howe, and Nissenbaum below), provides a structure for using value realization as a response to relevance. This part of the module will get you thinking about how to develop value realizing actions that respond to the relevance uncovered in STS description. See Harris below for a description of technosocio sensitivity that falls in nicely with the account of moral responsibility as response to relevance.

Understanding appropriate technological choice requires that you learn a basic vocabulary. This section presents short, informal descriptions of "appropriate," "technology," "capability," "social construction of

technology," and "technological determinism." At the end, you will find a media file for a Jeopardy to help you learn these terms.

Technology

Technology: As was said in the previous section, a technology is more than just a physical object. It is a device activated within a network of social relations called a socio-technical system. (See below for more on socio-technical systems or STSs.) Technologies are much more than value neutral tools; a technological object or artifact can become an extension of the human body, a prosthesis, that magnifies, focuses, intensifies, shapes, channels, and constrains human actions and activities. Taken by themselves they are incomplete and indeterminate; enacted within a socio-technical system, they accomplish human activities.

Socio-Technical System

Socio-technical System. Determining whether a technology is appropriate requires close attention to the socio-technical background which forms a system, a "complex environment of interacting components, together with the networks of relationships among them." According to Huff, a sociotechnical system is "an intellectual tool to help us recognize patterns in the way technology is used and produced." For example, Huff has his computing students write "Social Impact Statements" to outline the impact a computing technology would have on the socio-technical system (STS) in which it is being integrated. Students triangulate their impact claims through day-in-the-life scenarios, participatory observation, and surveys; any claim made on the impact of a technology has to be substantiated through three different methods of observation (in private conversations).

Socio-technical systems, thus, exhibit several characteristics.

- STS analysis helps us understand how occupational and professional practice is shaped and constrained by different surrounding environments.
- Socio-technical systems are first and foremost systems. While they are composed of discrete parts, these are embedded in a network of relations and interact with one another. Hence, STS description requires systemic or ecological thinking; a STS must be approached as a whole which is not reducible to the sum of its parts

- The different components of a STS can include hardware, software, physical surroundings, people/groups/roles, procedures, laws/statutes/regulations, and information systems. This list of distinguishable components varies according to context and purpose. These distinguishable components are, nevertheless, inseparable from one another. Repeating the previous point, *STSs are, first and foremost, systems*.
- STSs *embody or embed values*. This makes it possible to prepare Social Impact Statements that identify and locate embedded values, chart out potential conflicts, and recommend system adjustments to remediate these. STS analysis, thus, adds a dimension to the determination of the appropriateness of a given technology by raising the question of whether its incorporation into a specific STS leads to value conflicts or resolves value vulnerabilities.
- STSs *change* due to internal value issues as well as issues stemming from their interactions with other STSs. STS changes are directional in that they trace out trajectories or paths of change. Thus, another test of appropriate technology is whether its integration into a STS places that system on a *positive or negative trajectory of change*.
- To repeat a point made just above, STS analysis employs *systems or ecological thinking*. Just as important as the properties of the parts that compose a socio-technical system are the relations between these parts and the ways in which they interact. These relations and interactions give rise to properties that STSs as wholes display but which cannot be found when analyzing the constituent parts in isolation from one another. Another way of putting this is that STSs require holistic think that is markedly different from what sociologists call "methodological individualism."
- Werhane et al. in Alleviating Poverty provide an insightful account of systems and systems thinking. They see this as necessary in building and analyzing alliances between stakeholders devoted to diminishing poverty.

Appropriate Technology

Appropriate Technology. The term "appropriate technology" comes from economist E. F. Schumacher and plays a prominent role in his book, *Small Is Beautiful*. For Schumacher, an *appropriate* technology is an *intermediate*

technology which stands between the "indigenous technology of developing countries" and the "high capital intensive technology" of developed countries. Appropriate technology represents a step or a bridge that moves a community cautiously and continuously toward a developmental goal.

Thus, intermediate technology is *appropriate* in the sense that it reduces or eliminates the harmful impacts of moving too quickly from indigenous, labor intensive technology to high capital intensive technology. Technology that is appropriate to orderly, sustainable, and humane development ...

- gives "special consideration...to context of use, including environmental, ethical, cultural, social, political, and economical aspects";
- seeks simplicity as opposed to (manifest or latent) complexity;
- chooses decentralization because it is more orderly, sustainable, and human than authoritarian centralization;
- employs labor intensive as opposed to capital intensive strategies;
- addresses itself to the unique characteristics of the surrounding community
- This description of appropriate technology quotes directly from Wikipedia and from Schumacher. See below.

Capabilities or Human Development Approach

The Capabilities or Human Development Approach: Technologies need to be evaluated within the context of human projects, communities, and activities. In particular, they should be evaluated in terms of whether they promote or frustrate a life of dignity that can be spelled out in terms of substantial freedoms that Amaryta Sen and Martha Nussbaum term capabilities. Sen and Nussbaum argue that a given capability, say bodily health, can be realized in different ways. The specific way a capability is realized is called its functioning. Resoures (personal, social, and natural) that help turn capabilities into functionings are called conversion factors. (A bicycle is a physical conversion factor that (under favorable conditions such as roads with decent surfaces) turn the capability of bodily integrity into movement from home to work.)

The Capabilities Approach changes the way we view developing communities and their members, replacing the view of developing communities as beset with needs and deficiencies with the view that they are repositories of valuable capabilities. Humans should strive to shape and reshape the surrounding socio-technical system to bring about the exercise and expression of fundamental human capacities. According to Nussbaum, capabilities answer the question, "What is this person able to do or be?" Nussbaum and Sen characterize capabilities as "substantial freedoms,' a set of (causally interrelated) opportunities to choose and act. [T]hey are not just abilities residing inside a person but also freedoms or opportunities created by a combination of personal abilities and the political, social, and economic environment." The Capabilities Approach, thus, adds depth to appropriate technology by providing criteria for choice; a technology derives its "appropriateness" from how it resonates with basic human capabilities and more specifically by whether it provides "conversion factors" that transforms basic capabilities into active functionings.

Nussbaum's List

Nussbaum discusses the capabilities approach in several works most notable of which are Frontiers in Justice and Creating Capabilities. Sen lays out his version in several publications. **Development as Freedom** is referenced below. Finally, Robeyns discusses conversion factors in an article in the Standford Encyclopedia referenced below.

Basic Capabilities

- Life
- Bodily Health
- Bodily Integrity
- These capabilities overlap with basic rights. But the capability approach moves beyond the rights perspective by exploring the social and community-based dimensions of human agency; rights on the other hand are more individualistic. (See Werhane on this.) Bodily Integrity would include, for example, freedom from marital rape and the ability to move about freely within one's own country.

Cognitive Capabilities

- Sense, Imagination, Thought
- Emotion
- Practical Reason

• **Note**: Nussbaum's description of cognitive experience is richer than that allowed through the concept of homo economicus (the economic human) avowed by economical theory. (Homo economicus is driven by a narrow view of rational self-interest.) Emotions incorporate judgment, and practical reason overlaps with the autonomous ability to formulate and carry out thoughtfully life plans. Imagination and sensation are not separate from the knowing and cognitive faculties as they are, say, for Kant but closely connected with these as they are in the ethical theory of Aristotle. Full exercise of thought, sensation, and imagination could occur in aesthetic expression or religious experience. We explore emotions imaginatively through literature, drama, and cinema.

Social or Out-Reaching Capabilties

- **affiliation**: This capability allows forming alliances with others such as friendships and collegial workplace relations. This would include the capability to form associations such as a church, an NGO, or a political interest group.
- Other Species: Here Nussbaum is setting forth the rudiments of an environmental ethics where nature as a whole and the individuals within nature place constraints on human action. But, rather than formulating this traditionally in terms of the extension of utilitarianism or deontology, Nussbaum sees our ability to commune with nature as a necessary constituent of a life of human dignity or human flourishing.

Agent-Based Capabilities

- Control Over One's Environment
- Play
- The capability of play is deformed by child labor. Adam Smith, for example, comes out strongly against child labor in his economic theory and advocates strong government intervention to protect this capability. Childhood labor prevents children from reaping the developmental and psychological benefits of play. This capability militates directly against the idea that play is isolated and does not contribute to the formation of other cognitive and practical abilities such as emotion, thought/sensation/imagination, or practical reason.

On the other hand control over one's environment works directly against such poverty traps as uninsurable risk, lack of working capital, non-workable property practices, etc. See Stephen Smith below.

Capabilities lists vary. Nussbaum allows that others have different lists and that hers will certainly be modified as time passes and conditions change. Insofar as a technology plays the role of a **conversion factor** that transforms a capability into a functioning, then it is—-in the humanistic sense of the term—-appropriate. On the other hand, insofar as it thwarts capabilities and suppresses their expression it fails the test of appropriateness. When business and engineering professionals take a Human Development approach to their work, they broaden the design process and the development of new products and services to include a close examination of how the proposed novelty can either encourage or diminish the conversion of capabilities into functionings.

An advantage of the Capabilities or Human Development Approach over other approaches such as social contract theories of justice lies in its ability to extend the umbrella of justice to cover three challenges that have traditionally been ignored:

- 1. The capabilities and ranges of action of humans operating under physical and cognitive disabilities
- 2. Human individuals who have been born and live in nations of poverty, economic inequality, political oppression, and demeaning work and social roles and stations. In her book, *Creating Capabilities*, Nussbaum profiles a woman who is abused by her alcoholic husband, works longs hours in a demeaning job and returns home to the domestic responsibilities of being the primary care-giver to a family of four.
- 3. Natural ecosystems as well as natural species including domesticated animals, wild animals, and the entities that populate the natural environment.

Social Construction of Technology

This branch of technology studies provides insight into how technologies are socially constructed. Pinch and Bijker provide a case history of how the current bicycle design emerged from a social process of construction. In an initial stage of "interpretive flexibility," users interacted with different

designs as they negotiated in public space whether bicycles were for leisure, racing, touring, basic transportation, or sporting activities. As design variations were set aside and user goals and interests focused, this stage of interpretive flexibility narrowed and closed. In the final stage, a dominating design emerges that serves as a black box. With interpretive flexibility a thing of the past, the black box, the dominant design, takes on the appearance of inevitably; it captures the meaning of bicycle that was earlier up for grabs. (Pinch and Bijker discuss social constructionism in their paper referenced below. This can be easily found in the Johnson and Wetmore anthology, Technology and Society. This account builds on their discussion of the process of social construction: interpretive flexibility, closing of interpretive flexibility, and technological black box.)

The paper "Manufacturing Gender in Commercial and Military Cockpit Design," argues that it was necessary to reopen the black box of airplane cockpit design to reveal its instantiation of gender bias. Women were unable to fly airplanes because airplanes were not designed to accommodate their arm and leg reach, physical strength, height, and weight. This gender bias could only be removed through the restoration of interpretive flexibility. The gender biased design of airplane cockpits had to be revealed as a contingency rather than as a necessity.

Interpretive flexibility relies on an imaginative attitude that Steven Winter terms "transperspectivity." Designers must first "unravel or trace back the strands by which our constructions weave our world together" then "imagine how the world might be constructed differently." The capabilities approach compliments social construction of technology in that it asks how background social conditions can be changed to facilitate the realization of capabilities. Instead of forcing women to conform to inappropriate cockpit design, we ask how cockpit design can be reworked to facilitate the realization of the capability of women to fly planes.

Technological Determinism

Technological Determinism is the opposite of social construction. Where the position of social construction argues that society constructs or determines technology, the position of technological determinism argues that technology constructs or determines the dominant forms of social

interaction. While Langdon Winner is not a technological determinist, he lays out a terminology that dramatizes how technologies can cease to function as tools and, instead, take on the role of centers of concentrated power that dictate social forms and relations. Technologies create their own imperatives, that is, they assert their requirements as needs that demand fulfillment if we are to continue their functioning. These technological imperatives create the need for reverse adaptations. Instead of our designing and modifying technologies to fit our needs (technologies serve us), we set aside our needs and adapt ourselves to serving the requirements of complex technologies (we serve technologies). Winner discusses the technological imperative and reverse adaptability in Autonomous Technology. Larry Hickman provides an excellent summary of Winner's approach in John Dewey's Pragmatic Technology.

Questions for assessing the appropriateness of a technology

- 1. Does the technology in question play the role of a conversion factor that changes capabilities into active functionings? (Conversion factors are a bit like resources or means and can be personal, social, or environmental: see Robeyns) Review the ten capabilities outlined by Nussbaum. Does the technology in question help to realize a capability in the STS of your case? Which one? How? On the other side, does the technology threaten to thwart the realization of a capability? Which one? How?
- 2. Does the technology in question embrace simplicity and avoid (manifest or latent) complexity? The more complex a technology, the harder it is to control. As technologies become more complex they take on lives of their own. So one way of approaching this question is to assess the complexity of technology in terms of the background STS. Manifest complexity lies in the complexity that is obvious. Latent complexity is a negative factor in the appropriateness of a technology because latent complexity can often lead to unpredictable breakdowns and accidents.
- 3. Does the technology embody a decentralized approach to control, one that disperses control over many localized centers or does it telescope control in one, centralized powerful locale? Amish communities do not reject electricity per se but refrain from hooking up to power grids maintained by large public utilities in part because of this issue. As a

- general rule, a technology is more appropriate when it can be instantiated and managed through decentralized points of control rather than through large, bureaucratic, authoritarian centralized points of control and management. Windmills would be preferable on this criterion to nuclear reactors because the latter are subject to catastrophic failures; this requires the exercise of tight managerial controls better brought through centralized and concentrated points of control and management.
- 4. Does the technology realize or protect values (or resolve value conflicts) in such a way as to put the STS on a value-positive trajectory? This, more than any of the other criteria of technological choice, requires holistic thinking. Bringing a technology into a STS should require mutual adjustment. How will the STS have to be adjusted to incorporate the technology with the minimum number of value issues (value vulnerabilities or value conflicts)? Will these adjustments place the STS on a value-positive trajectory? On the other hand, how malleable is the technology? (This is something you have already begun to answer as you looked at the technology's complexity and centralization.) If malleable, it can be adopted to the surrounding STS. If not, then the problem of reverse adaptation arises.
- 5. Does the technology provide for a just distribution of relevant costs and benefits? Technologies create benefits and costs. Utilitarianism argues that the only relevant factor is the ratio of benefits to costs; if benefits are maximized and costs minimized, the utilitarianism enjoins that we adopt the technology. This criteria provides an important caveat; not must benefits be maximized and costs minimized but benefits and costs must be broadly and equitably distributed among the stakeholders. Net benefit maximization often stands side by side with massive inequities in the distribution of costs and benefits; everybody benefits from cheaper gas prices made possible by the refinery located near a lower class neighborhood. But those living next to the refinery bear the brunt of the costs if the gas is made cheap by sacrificing pollution controls.

III. What you are going to do.

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In this section, you will learn about five cases of technological choice. You and your group will be assigned a case and will carry out a series of exercise in relation to it. Specifically you will...

- 1. Learn about your case by reading the article on which it is based and discussing it with other members of your group.
- 2. Describe your technology: (a) Identify its key features; (b) Provide a history of its social construction; (c) Identify its competitors. (Think about the racing versus safety models of the early bicycle)
- 3. Prepare a socio-technical description of your case: (a) Identifies it major components. Start with hardware, software, physical surroundings, stakeholders, procedures, laws, and information systems. Add or subtract as required by the particularities of your STS. (b) Describe each component in detail (c) Provide a table that summarizes your description
- 4. Assess your case's technology using the questions on appropriate technological choice presented in the previous section
- 5. Draw conclusions about the instances of technological choice portrayed in your case. Is it appropriate or inappropriate? Explain your group's position.
- 6. Prepare a poster summarizing your group work and present it to the class
- 7. Listen carefully to the presentations of the other groups in your class

IV. Cases of Responsible Choice of Appropriate Technologies

A. Technological Choice in Amish Communities

- "Amish Technological Choice: Reinforcing Values and Building Commitments" by Jamison Wetmore
- How do the Amish choose and modify technology so that it is compatible with community values and supports community ways of life
- Values: Amish values are centered around the community's Orduung.
 In general, Amish evaluate technologies in terms of the values of humility, equality, simplicity, and community. (See Wetmore)

• Examples: (a) Using power tools with rechargeable batteries to work around the need to connect to Electric company power grids; (b) Refraining from plugging into the grid of public utilities; (c) Purchasing cars and phones but restricting ownership to the community and use to business purposes; (d) Negotiating accommodations on government regulations so as to minimize impacts on community values and ways of life. (Example of not delivering milk on Sundays); (e) Securing community and individual identity by drawing, through technological choice, contrasts with the outside, surrounding, English community.

B. Removing Gender Bias from Airplane Cockpit Design

- "Manufacturing Gender in Commercial and Military Cockpit Design" by Rachael Weber
- This case describes the process of changing the design of airplane cockpits to remove gender bias.
- Values: (a) gender parity and equality; (b) respect (recognizing capabilities of women and designing airplanes around these capabilities); (c) justice in the form of an equitable distribution of the role and the benefits and burdens attached to the role of airplane pilots
- Article describes changes in the STS: (a) Norms: how do changes in society's norms help facilitate the redesign of airplanes and the cockpits? (b) Laws: how did changes in laws and regulations help uncover the gender bias in designs and spur the development of new designs that removed this gender bias? (c) Markets: The initial reaction of airplane manufacturers and consumers was that this would make airplanes prohibitively expensive. What changes in the market or financial context averted this threat? (d) Architecture: How did changing the JPATS help to solve this problem?

C. Uchangi Dam

C. Honest Brokering in India

- "People's Science in Action: The Politics of Protest and Action" by Pradkhe
- Retired engineers working with NGOs in India help resolve a 14 year standoff between the Indian government and villagers in Chafawade

- and Jeur. The engineers carried out detailed studies into the STS surrounding these villagers including land use mappings. They were able to formulate plans for a different irrigation system that had less impact on these communities but still delivered the basic functions of an irrigation project.
- Values: (a) Responsibility: Shift design responsibility from a
 bureaucratic government agency to local communities empowered by
 work with NGO engineers; (b) Justice: Develop and design an
 alternative irrigation project that bettered distributed harms and
 benefits of irrigation among all the stakeholders; (c) Community
 Solidarity: Use government challenge as an opportunity to discover
 community values and give these voice through locally organized
 resistance and value responsive engineering plans
- Technologies: (a) Replace single large scale dam with several smaller dams; (b) Relocate water storage sites away from Chafawade and Jeur; (c) Redistribute and spread both the benefits and harms associated with the Uchangi dam and irrigation project. (d)Reconstruct the stakeholder alliance to represent better the interests of small villages in this region of India

D. Rapunsel: Designing Value into Educational Software

- M. Flanagan, D. Howe, and H. Nissenbaum, "Embodying Values in Technology: Theory and Practice," in *Information Technology and Moral Philosophy*, Jeroen van den Hoven & John Weckert, Eds. Cambridge, UK: Cambridge University Press, 2008, pp. 322-353.
- Educators in software development notice that there is a shortage of women programmers. Further investigation reveals that part of the problem is the gender bias inherent in software development including pedagogical materials (educational software) that is biased toward male and against female students. Educational specialists develop new educational software called Rapunsel that is geared toward computer programming to girls. Developers enact a value realization process that includes the discover of key values, their translation of these values into a design prototype that operationalizes and implements these

- values in software, and a rigorous process to verify that the design in question actually realizes these values.
- Framework: (a) Discover by examining project definition, design features, designer values, user values including the values inherent in "subversive uses" (b) Translation that includes the operationalization of values in a design and their implementation in a concrete STS; (c) Verification brought about through the triangulation of methods of participatory observation that include questionnaires, interviews, and day-in-the-life-scenaios
- Values: (a) Project Definition: social and civil interaction, privacy, security, equity; (b) Design features: social and civil interaction, cooperativeness, fair and equitable representation; (c) Designer Values: diversity, distributive justice, gender equity; (d) User values: self-expression, authorship, collaboration
- Examples: (a) Educational software to teach girls computer programming; (b) Enacted in the form of a game environment; (c) Modified in light of participatory observation and "subversive uses"

E. One Laptop Per Child

- Kenneth L. Kraemer, Jason Dedrick, and Prakul Sharma. "One Laptop Per Child: Vision versus Reality." Communications of the ACM. June 2009, Vol. 52, No. 6: 66-73
- This case explores the challenges of implementing a laptop computer designed as an educational tool for children in developing nations. Laptops are chosen because, in the minds of the designers, they can deliver the tools of education in one convenient package. They present and create modes of interacting with educational software; they provide a convenient way of storing and displaying reading material and promise to replace traditional printed media; they create an environment where students can learn writing working through word processing media. And the innovation of the XO laptop is that it has been designed for use by children in areas that lack infrastructure for other, traditional educational media.
- Values: (a) Distributive Justice. XO laptops, because they are cheap and linked with sponsorship by developed world institutions, promise to reduce the digital divide by giving children (and their families) in

- developing nations access to computers, the Internet, and all the information that the two can bring. (b) Realizing Capabilities. XO laptops can play the role of conversion factors transforming the following capabilities into functionings: Sense, imagination, and thought; Emotion; Practical Reason; Affiliation; Play
- Examples: (a) Fedora Linux Operating System; (b) WiFi access to Internet; (c) Hand cranks to recharge batteries. XO laptops are designed to operate in zones where there is no or insufficient electricity; (d) No drives. Relying on less sophisticated operating system software reduces the demand for storage capacity. (Given Internet access, many storage needs can be delegated to the Internet.) This further simplifies the system and makes it unnecessary to install a hard drive. (e) Designed for children. Hard, durable plastic casing and keyboards shaped for children's hands

F. Case for Waste for Life

- This case studies a press that produces building materials made from waste products and plant fibers.
- One chapter examines the integration of this technology into Lesotho.
- The other chapters look at the STS in Buenos Aires, Argentina and how it constrains the integration of similar technology there.
- This case study is available to UPRM students through the university's library. It is a part of the Morgan and Claypool series found in the section on electronic books.
- Complete Bibliographical Reference: C. Baillie, E. Feinblatt, T.
 Thamae, and E. Berrington. (2010). Needs and Feasibility: A Guide
 for Engineers in Community Projects--The Case for Waste for
 Life. Morgan and Claypool.

G. Aprovecho

- Aprovecho is a non-profit organization that specializes in stoves for developing nations.
- Respiratory disease from the pollution from stoves used indoors is a major cause of death for children under 5 years old in developing nations.

- Aprovecho is considering setting up a regional center for testing and distributing stoves in Puerto Rico.
- Are these stoves an appropriate technology for PR or even parts of PR?
- Be sure to listen to the NPR story on Aprovecho and the NPR series on Social Entrepreneurship
- Link given above: http://www.aprovecho.org/lab/index.php

V. Case Table

This table updates the technology choice cases used in this module.

Technology Choice Cases

Technology Choice Cases

	Description	Capabilities	Technology choice Issues	Puerto Rico Pivot(s)
One Laptop Per Child	Distributing laptops to school children in developing nations	Affiliation, play and practical reason	For or not for profit?	Laptops to PR public school childrenWould it work?
Amish TC	How Amish use community values to choose and modify technologies	Emotion, affiliation, Thought Practical reason Control over env.	Not anti-tech; adopt and adapt using community values	Consider citizens of Vieques and whether they should allow windmill farms.
Gender Bias in Airplane Design	Redesigning airplane cockpits for women pilots	Control over one's environment	Going from women can't fly to planes are badly designed for women pilots	Are there designs in Puerto Rico that exhibit gender bias?
Bamboo	Using bamboo grown in PR as construction material	Other species, control over one's environment	Appropriateness and conversion of natural artifacts into technical	Creating a resource that is locally grown, harvested, and used
Biosand Filters in Haiti	Teaching people in Haiti how to use biosand filters to clean water	Health, bodily movement, affiliation	Using modern knowledge, simple artifacts, decentralization and other AT criteria	Lessons of community development and decentralization
Uchangi Dam	NGO engineers resolve a dispute between local communities and big government	Affiliation, bodily movement, control over env	NGO professionals as honest brokers in technological choice	Using values mapping to build local relevance into engineering designs
Aprovecho	Designing stoves to alleviate problems of indoor smoke and deforestation	Health, other species	Participation of local community in design of technical artifact	Listening to users and communities: an Inverse Peace Corps
Waste For Life	Using a hot press to recycle plastic in Argentina and Lesotho		Same artifact, different STS, different results	

VI. Instructions for Poster Session

In this activity you will carry out the following tasks:

- 1. Read carefully the article that presents your case study in technological choice. Prepare an outline.
- 2. Prepare a poster that discusses your case in terms of the following framework.
- 3. **Zoom in**. Describe and classify the artifact that highlights your case. Give its physical structure, how it functions when it is working properly, and its "user manual."
- 4. **Zoom out**. Describe the socio-technical system that surrounds your artifact by constructing a table that outlines hardware, software, physical surroundings, people/groups/roles, procedures, laws, and information systems. Pay special attention to how the surrounding STS constrains and enables the functioning of your technical artifact.
- 5. Discuss/Evaluate how "appropriate" your technical artifact is to its surrounding environment. Is it "supportive of production by the masses," does it make use of the "best of modern knowledge and experience," does it trend toward "decentralization," does it fit in with the "laws of ecology," is it "gentle in the use of scarece resources," and does it serve human rather than constrain humans to serve it."
- 6. How does your technical artifact stand in relation to Nussbaum's list of **capabilities**? Most importantly, does it serve as a tool to address personal, social, and environmental conversion factors that help convert capabilities into functionings?

Close-out Writing Assignment

- 1. Choose a technical artifact from another group's poster. (Not the one prepared by your group.)
- 2. In one or two sentences, describe what is happening when the technology is fully functioning. This is called "**zooming in.**"
- 3. Next, choose the two elements of the surrounding socio-technical system that most effect this technical artifact and its functioning. For example, the lack of electricity in communities in Zimbabwe have a strong impact on whether and how podcast broadcasts will take place. This focusing on the socio-technical system will help you to "zoom out."

- 4. Choose a capability from Nussbaum's list that is pertinent to the technical artifact you have chosen. Does this artifact serve as a conversion factor that converts the capability into a specific functioning? What personal or environmental factors could effect this conversion?
- 5. Formulate a test question (multiple choice format) that you think would arise from this group's poster and their technology choice case.
- 6. Zooming in and zooming out comes from Ilse Oosterlaken and can be found in **The Capability Approach, Technology and Design**, Ilse Oosterlaken and Jeroen van den Hoven, eds. New York: Springer, 2012.

VII. What have you learned?

- Technological choice is as much a skill as a set of concepts that you learn. This module has given you the opportunity to practice frameworks of technological choice in the context of real world cases. To help you capture what you have learned, reflect on the following questions:
- How does practicing technological choice help us to see technologies less as isolated objects and more as enactments?
- Using your case and the cases presented by the other groups in class in what sense and to what extent is the nature and structure of technology determined or constituted by social structure?
- Again, working with the cases studied in the module, under what conditions can technologies escape our control and, in turn, control us?
- What are the features and uses of a good, concrete STS description?

VIII. Jeopardy for Responsible Technological Choice

These exercises using the format of Jeopardy will help you learn the vocabulary of responsible technological choice. Click on the media file and download the Jeopardy as a PowerPoint. To play the game, simply put the PowerPoint in presentation mode. Several of the slides also have links to information slides that explain further the relation between question and answer.

Socio-Technical Systems in Incident at Morales

https://cnx.org/content/m43922/

More Jeopardy on Socio-Technical Systems

https://cnx.org/content/m43922/

Cases of Responsible Technological Choice

https://cnx.org/content/m43922/

Presentation: Training responsible agents for global contexts

https://cnx.org/content/m43922/

Technology Choice Jeopardy

https://cnx.org/content/m43922/

Socio-Technical Systems, Technology, and Human Capabilities

https://cnx.org/content/m43922/

STS PowerPoint

https://cnx.org/content/m43922/

Writing Cases Pesentation

https://cnx.org/content/m43922/

Technology Choice Presentation

https://cnx.org/content/m43922/

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Approaches in Environmental Ethics For Business and Engineering

This module has been developed for students in Business Administration and Engineering. Students learn to integrate ethics into environmental problem-solving by studying different approaches (deontology, utilitarianism, virtue) that take different perspectives (individualistic/holistic, anthropocentric/nonanthropocentric) on real world environmental problems. Three cases taken from Puerto Rico introduce these themes: Super Aqueduct, Windmills, and Gas Pipelines. The characterization of environmental problems as "wicked" comes from Rittel and Weber. Students are given tools for tackling these ill-structured situations that resist more traditional approaches. Ethical approaches in environmental are presented to help uncover the ethical, social, political, economic and ecological dimensions of interdisciplinary environmental problems. Real world cases provide a practical "laboratory" in which students can try out and test problem solving frameworks. Finally, reflective activities and reference materials are provided to help achieve module closure. This module has been developed as part a project funded by the National Science Foundation, "Collaborative Development of Ethics Across the Curriculum Resources and Sharing of Best Practices," NSF-SES-0551779.

Note: This section provides a brief description of the links provided by this module. These sources are designed to suppliment the material provided in this module and to help you navigate the resources displayed on the internet to find materials of value in environmental ehtics.

- The Zoe Colocotroni was an oil tanker that became grounded on a reef off the southwest coast of Puerto Rico. This led to a famous legal decision and a creative solution to the problem of determining damages to the environment.
- Ethics Updates links to a wealth of online materials related to environmental ethics. Many of these can also be found at the North Texas University website.

Word Version of this Template https://cnx.org/content/m32584/

This is an example of an embedded link. (Go to "Files" tab to delete this file and replace it with your own files.)

Cases

These cases touch on environmental problems in the Puerto Rican context. To respond, begin with a socio-technical analysis of Puerto Rico. To help, please look at http://cnx.org/content/m14025/latest/.

You will find an STS table toward the end of the module in the form of a media file. Click on this file to open tables that describe Puerto Rico in the context of engineering and energy generation.

Super Aqueduct

- In the 1990's, the San Juan Metro Area suffered chronic water shortages during the summer months. High demand in the Metro Area (which covers about one third of Puerto Rico) coupled with less rain in the summer months was one cause. Decaying and neglected water infrastructure (leaky water lines, illegal taps into the water supply, and silt-filled reservoirs whose water storage capacity had been drastically reduced), high temperatures, and less rain provided the other causes.
- During the late 1990's, government and water officials debated different options for resolving
 the problem. First, they imposed a rationing system where water was turned off except for short
 periods in the morning and evening. This discouraged nonessential uses such as watering lawns
 and filling swimming pools, but rationing proved unpopular and failed to address the broader,
 underlying causes.
- Another solution emerged based on moving water from other parts of the island where supply
 was plentiful and population sparse to the areas of scarcity. Called the Super Aqueduct, this
 pipeline would transport water from the Rio Grande south of Arcecibo to San Juan and
 surrounding communities. Objections to the super aqueduct focused around environmental and
 safety concerns.
- First, taking water from the Rio Grande would reduce the amount of fresh water that flowed into the Arecibo estuary, an ecosystem that emerged where the fresh water of the Rio Grande flowed into the salt water of the Atlantic Ocean. Reducing the flow of fresh water into the estuary would harm the estuary. Moreover, it would accelerate the draining of Puerto Rico's main aquifer located in the north under the limestone hills that form what is called the Karst region. Highway construction, individual wells and the general decline of the rivers that deliver fresh water to the Atlantic have all drained fresh water from this aquifer which has been replaced by salt water drawn in from the Atlantic.
- Opposition to the Super Aqueduct also raised safety concerns. The aqueduct was designed to
 deliver up to 100 million gallons of water per day to the San Juan area. This made it essential to
 design and construct pipes that could contain water running through it at such high pressures.
 Moreover, it required careful planning in locating the pipeline to make sure that avoided densely
 populated areas. To dramatize this, a section of pipeline burst during a routine test causing
 considerable property damage. Fortunately, nobody was at home when a river of water inundated
 several houses sweeping away heavy appliances such as washing machines, refrigerators, and
 stoves.
- The Super Aqueduct was constructed and activated in 2002. It is now transporting water to the Metro Area and the chronic water shortages in the summer have stopped.

Windmills

- Kristin Shrader-Frachette classifies energy generation technologies as following either hard or soft paths. (She attributes this distinction to Amory Lovins.) "The hard path is centralized, capital intensive, large scale, complex, and energy intensive." On the other hand, "the soft path is characterized by decentralization, smaller capital investments, small-scale organizational structures, and less complex, labor-intensive technologies."
- The windmill project, currently under debate in Puerto Rico, seems to have a foot in each. In its earlier phases, windmill technology walked on the soft path with decentralized ownership, small scale operation, low capital investment, and simple design. But the plan set forth by a private

- company to build a windmill farm in Puerto Rico has been met with local opposition that seeks to locate it on the hard path.
- The windmills are to be built on a plot of land adjacent to the Dry Forest of Guanica, a fragile nature preserve under the protection of the United Nations and the Puerto Rican government. Some fear that the windmills would kill birds from the many endangered species that have sought refuge in the preserve.
- Others are concerned that the company proposing to build the windmill farm cannot be trusted to remain focused on windmill technology; they fear it will be used as an excuse to industrialize the Guanica/Ensenada areas with harmful environmental and social impacts. Industrialization would disrupt a way of life for residents that dates back to the sugarcane plantations that operated until the early 1970's.
- The public hearings carried out on the project by the Puerto Rican government were poorly publicized and held in an exclusive resort complex located on the far side of the island, a good day's drive from the Dry Forest of Guanica. Those already concerned about the environmental impact of the windmill project, now added concerns about their rights of participation and social justice.
- "What," they ask, "are public officials trying to hide?"

Gas Pipelines

- Puerto Rico depends almost entirely on petroleum to fuel the plants that produce the island's electricity. In 1992, a project developed by the private company, Cogentrix, to produce electricity and sell steam as a byproduct using cheap and widely available coal was defeated by groups in the Mayaguez area concerned by the plant's environmental impacts. Both the proponents of the plant and the electric authority predicted chronic shortages and black outs by the turn of the century. These predictions have turned out to be true.
- Moreover, the environmental impact of the oil-dependent generating plants combined with the instability of the world oil market has brought the energy crises to Puerto Rico. The EPA has ordered the Puerto Rico energy authority, called the **Autoridad de Energía Eléctrica (AEE)**, to reduce its dependence on oil for the production of electricity to below 50% by the year 2010.
- To comply, the AEE has turned to natural gas and has begun the construction of a pipeline from the coastal region near Penuelas to electricity plants on the other side of Ponce. The technology surrounding natural gas is sound, safe, and clean. But the location of the pipeline and the environmental and social impact of its construction has caused damage in largely poor communities.
- Residents interviewed state that they were not properly informed that the pipeline would be situated so close to their homes or that the construction would have such a grave impact. They claimed that they were not able to participate in the public hearings held on the pipeline and have been forced to bear an unjust burden of its social and environmental costs.
- Does the use of natural gas delivered to electricity generating plants by means of underground pipelines represent good, sustainable environmental decision-making?
- What should the AEE and the Puerto Rican governmental officials have done differently to anticipate better the social justice concerns of those living near the construction sites of the pipelines?

Introduction

• In this module you will learn about the different approaches to environmental ethics. A table will summarize and classify the different approaches that have dominated the discussion for the last

- thirty years. These include extensionism, environmental virtue ethics, ecocentrism, biocentrism, and the land ethic.
- Another table will help you to analyze problems in terms of the priority of basic over non-basic interests and human versus non-human interests. This will help break the habits we have of automically favoring human over non-human interests when making environmental decisions.
- Byron Norton provides a Pragmatic approach to the environment that makes use of his considerable experience inside the Environmental Protection Agency. You will use a framework here that summarizes the different principles/values that he uses to define "sustainability."
- Forming the background of environmental decision-making are basic concepts and procedures
 outlines in the discipline of ecology. This module will provide some basic definitions of
 ecological concepts like ecosystems. It will also outline some of the intellectual history of
 environmentalism by sketching different approaches to ecology as set forth by historical figures
 like Clements, Gleason, and Tansley.
- Finally, an exercise section will help you integrate and practice these frameworks and concepts
 in the cases discussed above. When you finish this module, you will have a fuller, richer
 standpoint from which to make environmental decisions in the occupational and professional
 contexts.

What you need to know ...

Environmental Concepts

- **Ecosystems**: "Ecosystems--forests, wetlands, lakes, grasslands, deserts--are areas in which a variety of living organisms interacting in mutually beneficial ways with their living and nonliving environments."(Des Jardins, 166)
- **Ecosystems**: "Ecosystems are self-organizing systems that unfold on many scales and at many speeds; indeed, ecosystems exist on all scales from microhabitat to eco-region, so it is apparently irrelevant to ecological risks to identify at-risk individuls and count risks to them. (Norton, 9)
- Characteristics of Ecosystems: (1) Boundaries serve to separate and distinguish ecosystems. These boundaries are porous, and ecosystems interact with one another. (2)Niches provide organisms within ecosystems with roles and associated activities. These niches organize organisms and their activities. Then the niches, themselves, are coordinated and interact within the overall ecosystem. (3) Succession characterizes the tendency of ecosystems toward internal and external dynamic integrity. Internally, the activities of organisms within a niche are coordinated with one another, and theses niches, themselves, interact according to stable patterns. In the past ecosystems evolved by passing through a succession of intermediate states toward a climactic stage characterized by internal and external equilibrium. This climax phase represents the ecosystem in its most mature phase.
- Evolution: Charles Darwin "discovered" the theory of evolution and set forth its basic elements in his monumental work, "The Origin of Species." (1) The main thesis of evolution is that species, themselves, change, evolving in response to changes in the surrounding environment. (2) The main principle guiding the evolution of species is natural selection. Randomly produced variations embodied in the individuals that populate a species are, for the most part, not that important to survival. But occasionally a variation gives an individual a survival advantage that is perpetuated through this individual's increased ability to pass on these characteristics through reproduction. In this way, the surrounding environment filters out most random variations in individuals, allowing only those that provide a competitive advantage to be passed on. Over time, this leads to changes in the species itself. (3) Darwinism is important to environmental ethics because it provides a broader framework in which to understand the impact of human

activities on the surrounding natural environment. Darwinism conveys both how dynamic the natural environment is and also how susceptible it is to the impact of human activities.

History of Ecology

- Phase I—Clements: "Nature's course ... is not an aimless wandering to and fro but a steady flow toward stability that can be exactly plotted by the scientist. In any given habitat there occurs a clear progression through what Clements termed a "sere," a system of developmental stages that begins with a primitive, inherently unbalanced plant assemblage and ends with a complex formation in a relatively permanent equilibrium." Worster, EN, 210 "the unit of vegetation, the climax formatin, is an organic entity. As an organism, the formation arises, grows, matures and dies....The climax formation is the adult organism, the fully developed community, of which all initial and medial stages are but stages of development. Succession is the process of the reproduction nof a formation, and this reproductive process can no more fail to terminate in the adult form in vegetation than it can in the case of the individual." (Clements quoted by Worster, EN, 211)
- Phase II—Gleason and Individualism: The Individualistic Concept of Plant Association.
 Ecosystems are not organisms. They do not form associations but "mere accidental groupings."
 Hence, Gleason criticizes the notion of ecosystems working toward a climax state. Worster, EN, 238
- Phase III—Tansley and Individualism: Tansley rejected the "monoclimax" views of Clements. He also felt that it was wrong to define the climax state of ecosystems indepedntly of human influence. "Anthropogenic" climax: "biological system that is artificially created by humans but is as stable and balanced as Clements' primeval climax." Worster 240. Tansley sees ecosystems as physical systems. Ecosystems are arenas in which an exchange of energy and chemicals takes place. This allows for ecosystems to be treated analogously to electricity and using field theory in physics and its associated mathematical models. This also allows for ecology to move from methodological holism to methodological individualism: the behavior of the ecosystem is reducible to the sum total of the behavior of its parts

Approach	Description	Method	Proponents	Leading Questions, Values, and Virtues
Non- Anthropocentric Holism	Land Ethic: A thing has value or is good insofar as it promotes the integrity, stability, and beauty of the biotic community.	Focus of analysis and study is on ecosystem as a whole	Sessions (Deep Ecology); Aldo Leopold according to Baird Callicott's reading	(1) Respect for Biotic Communities (2) Prudence: "the midpoint between 'a mad rush into oblivion' and an 'intransigent do-

	Biotic community includes humans, non-humans, species, and ecosystems all interacting as a system.			nothingness'" (3) Practical wisdom or judgment: "showing 'sensitivity' to ecological communities and their members and sorting out the rival claims and interests within and among communities." See Shaw, "Aldo Leopold's Land Ethic
Non- Anthropocentric Individualism	Biocentrism: This approach attributes moral consideration to all living things. It is based on respecting all "teleological centers of a life."	Individual living things are focus of analysis. Objective is to find the telos or lifedirecting goal of each living individual.	Paul Taylor; John Rodman; Albert Schweitzer	(1) Find, through sympathetic imagination, an individual's "teleological center of a life, i.e., its proper good. (2) Respect it by refraining from interferring with it and promoting the circumstances its needs to realize its end (=telos)
Anthropocentric Holism	Virtue Environmental Ethics: Approach centers on virtues as habits that promote sustainable transactions with the natural		Rosalind Hursthouse; Sandler/Cafaro et. al.	(1) Virtues of Position: "Constructive habits of seeing ourselves in a particular place in a relational structure and interacting accordingly.

environment. Hursthouse provides a provocative example with the virtue, respect for nature. (2) Virtues of Care: "habits of constructive involvement within the relational structure where we have found our place. How widely do we cast our sensors in order to learn what is needed around us?" (3) Virtues of **Attunement:** "habits of handling temptations by adjusting our positive, outgoing drives and emotions to match our chosen place and degree of constructive, ecosocial engagement." (4) Virtues of **Endurance**: "habits of facing dangers and difficulties by handling our negative, protective drives and emotions in such a way that we can sustain our chosen sense of place and degree of constructive ecosocial engagement." Wensveen, 176-177

Extensionism: (1) Moral value is extended of individuals via sentiency, i.e., their capacity to suffer. (2) Moral rights are extended to individuals via preference autonomy, i.e., having desires and the capacity to act on them.		Peter Singer (Animal Liberation); Tom Regan (Animal Rights)	(1) Extending Utilitarianism: (a) What are the sentient creatures involved? (b) What impacts do our actions have on them? (c) What is the overall balance of benefits and harms? Does this balance maximize utility? (2) Extending Deontology: (a) What/who are the moral patients involved? (b) What are their rights? (c) Does the proposed action violate any of these rights? (d) Who speaks for these moral patients?
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Table One: Outline of ethical approaches to environmental problem-solving

Deep Ecology Platform (Naess and Sessions)

- 1. The flourishing of human and nonhuman life on earth has intrinsic value. The value of nonhuman life-forms is independent of the usefulness these may have for narrow human purposes.
- 2. Richness and diversity of life-forms are values in themselves and contribute to the flourishing of human and nonhuman life on earth.
- 3. Humans have no right to reduce this richness and diversity except to satisfy vital needs.
- 4. Present human interference with the nonhuman world is excessive, and the situation is rapidly worsening.
- 5. The flourishing of human life and cultures is compatible with a substantial decrease of the human population. The flourishing of nonhuman life requires such a decrease.
- 6. Significant change of life conditions for the better requires change in policies. These affect basic economic, technological, and ideological structures.

- 7. The ideological change is mainly that of appreciating **life quality** (dwelling in situations of intrinsic value) rather than adhering to a high standard of living. there will be a profound awareness of the difference between big and great.
- 8. Those who subscribe to the foregoing points have an obligation directly or indirectly to participate in the attempt to implement the necessary changes. This Deep Ecology Platform was developed by Naess and Sessions and quoted in Des Jardins, p. 217.

Human Goods/Non- Human Goods	Basic Non-Human Good	Non-Basic, Non-Human Good	
Basic Human Good	Basic human good has priority because of right of survival. (Humans need to clear wilderness to grow food)	Basic human good has priority because a basic good has priority over a non basic good. Cutting back branches on a tree to prevent them from breaking off and killing school children	
Non-Basic Human Good	The basic, non-human good has priority because a basic good has priority over a non-basic good. Ex: I ought not cut down my trees to pave over my backyard and park my car.	Toss-up. Some non-basic goods have priority over others. I may, for example, have the right to deprive a non-human of some good in order to preserve an important (but not basic) cultural or historical good.	

Conflicts Between Goods: A Schema for their Analysis and ResolutionTrade offs between human and non-human, basic and non-basic goods.

Notes on Table Two

- Sacrificing one good for another is always a last resort. This requires that you do the following first:
- That you have first looked hard for ways to harmonize or integrate the conflicting goods. Chances are, you can design a value-integrating solution.
- That the conflict between goods can only be resolved by the sacrifice of one to the other.
- That if you do--as a last resort--find it necessary to sacrifice one good, that you find a way to offset this. For example, AES planted trees in Costa Rica to sequester the carbon that it produced in its co-generation plants in the US.
- That the sacrifice of the basic non-human good be only for the short term. That preventive measures be taken now to prevent such a sacrifice in the future.

Norton's Approach to Environmental Problem-Solving

Wicked Problems

- Norton, drawing from Webber and Rittel, characterizes environmental problems as "wicked." This may not be the most felicitous choice of works since declaring problems wicked seems to place them beyond solution. But wicked can be spelled out to show that environmental problems are solvable but require a different, more social and interdisciplinary approach.
- Wicked problems are difficult to formulate because they cover "ill-structured" situations. Specifying them requires the exercise of the structuring capacities of imagination. And it requires recognition that these problems can be brought to determination in different ways.
- Wicked problems are not numerical problems. (Non-computability) They have components or regions that admit of quantification but, as a whole, resist quantification. This requires that environmental problem-solvers go beyond economic and quantitative ecological methods.
- Wicked problems are non-repeatable. This is, perhaps, an indirect way of saying that they are context bound. Because the context shifts from situation to situation, what works in one situation must be reconstructed to fit the specific content of a different, new situation. We learn from the past but the past must be modified to fit the context of the present and future.
- Both wicked problems and their solutions are open-ended. We can distinguish between good and bad problem specifications and good and bad solutions. But there is no uniquely correct problem formulation and there is no uniquely correct solutions. Pragmatists argue that this is due to fallibilism (our efforts to reach the truth always fall short) and experimentalism (our solutions must be tested in the crucible of experience).
- Finally, wicked problems must be approached from an interdisciplinary standpoint. They present economical, ecological, social, and ethical dimensions that must be integrated in the problemsolving process. This is, decidedly not multidisciplinary where the disciplines are present alongside one another but do not interact. In environmental problem-solving these disciplines much engage and challenge one another, work to formulate common problems, and design solutions that integrate the different disciplinary concerns and aims.

Norton's Sustainability Values

- **Community Procedural Values**: These are values (reciprocity, publicity, and accountability) that, when adopted by a community, help it to structure a fair and open community deliberative process.
- Economic Values: Economic goods emerge from actual and hypothetical values. (1) Willingness-to-Pay: the instrumental value of a resource is set by the price an individual or group would be willing to pay to acquire the resource; (2) Willingness -to-Sell: because WTP undervalues resources (it ties value to the constraint of disposable income) a more accurate measure of value would be the amount that an individual or group would accept from a bidder to take the resource out of its current use and put it to a different one.
- **Risk Avoidance Values**: Precautionary Principle--"in situations of high risk and high uncertainty, always choose the lowest-risk option." 238
- **Risk Avoidance Values**: Safe Minimum Standard of Conservation--"save the resource, provided the costs of doing so are bearable."348.
- **Values Central to Community's Identity**: Justice, integrity, trust, responsibility, and respect can apply here but they should be taken in their thick as well as thin senses. These values, in their thick sense, depend on the quality of the discourse generated within the community.

What you will do ...

Exercise One: How Much is El Yunque Worth?

- Assume a developer is interested in purchasing El Yunque (the only tropical national park in the United States) for the purpose of turning it into qa recreation center. They have made their bid. A referendum has been announced where the Puerto Rican people can try collectively to out-bid this developer. Please indicate below the maximum amount you would pay each year to keep El Yunque in its present condition.
- El Yunque has just been purchased by Mega Entertainment, a huge, multi-national, mass media and entertainment park conglomerate. They plan on cutting down all the tropical stuff and replacing it with a recreation center, amusement parks, a theme park, several gourmet theme restaurants, a high end shopping mall, and a hotel-resort complex. You consider spending your honeymoon in the new Mega Entertainment El Yunque resort complex. The following are reasonable rates for a week-long stay in a resort complex. How much would you be willing to pay? (a) below \$500. (b)\$500-\$1000. (c)\$500-\$1000. (d) More than \$2000. (Assume these prices are competitive with other, high scale resort complexes.
- If the amount that you are willing to pay in #2 is greater than what you would be willing to pay in #1, does this mean that you value the Mega Entertainment El Yunque recreation complex more than the El Yunque National Park? Explain your answer.
- Now, assume that you as a Puerto Rican jointly own El Yunque as a national treasure. How much would Mega Entertainment have to pay you (and other Puerto Ricans) for you to become "willing to sell" El Yunque? What, in other words, is your selling price?.
- Compare your selling price with your paying price for El Yunque. What factors constrain what you are willing to pay? What considerations influence the price at which you are willing to sell?

Exercise Two: Super Aqueduct

- The Super Aqueduct provides an interesting test for a conflict between basic human and non-human goods. Having affordable drinking water is a basic good for humans. However, is it necessary to sacrifice the estuary from which the Super Aqueduct pumps water in order to serve the water needs of the San Juan Metro area?
- Several questions have to be answered
- How much water must be pumped out of the Arecibo estuary?
- Is the Super Aqueduct the only means by which safe drinking water can be delivered to the San Juan Metro area?
- Have other measures like conservation been tried and thoroughly tested?
- Can the water shortages in San Juan be addressed by other partial solutions like repairing and up-dating infrastructure?
- Are technical solutions like desalinization viable in the short and long term?

Exercise Three: Windmills and Environmental Virtues

- Louke Van Wensveen identifies four virtue groups for environmental ethics. These consists of virtues of (1) Position, (2) Care, (3) Attunement, and (4) Endurance.
- If the windmill project were carried out in accordance with these virtues would it be a moral imperative to go ahead with the project?
- How would these virtues guide the design, construction, and operation of a windmill farm?
- Who would carry out the project? What would the role of the government be? What would the role of the local commmunity be?

Exercise Four: Land Ethic and Oil Refineries

- Examine the oil refinery in Catano, Puerto Rico in terms of the four virtues Shaw attributes to Leopold's Land Ethic
- How does the project stand in relation to the virtue of **Respect for the Biotic Community**?
- How does the project stand in relation to the virtue of **Prudence**?
- How does the project stand in relation to the virtue of **Practical Wisdom or Judgment**?

"Do Not Feed the Bears?"

- Last February, in the middle of a cold morning, a bison bull plunged through the ice-covered Yellowstone River near Fishing Bridge in the center of the park and was unable to extricate himself. Water vapor steaming from its nostrils in the crisp air, the 2,000 pound animal struggled in vain, succeeding only in enlarging the hole. About 10:30 a.m. park employee Barbara Seaquist, a member of the young Adult Conversation Corps, discovered the drowning bison and contacted park headquarters. A park ranger replied that the incident was a natural occurrence, and the bison should be allowed to sink or swim on its own. Meanwhile, several persons who had heard about the struggling beast appeared on the scene to photograph it.
- By about 5:00 p.m., as dusk was settling on the bison's struggle for life, a party of nine snowmobilers approached the bridge. After learning from Seaquist that assisting the buffalo was against park policy, one of the snowmobilers, Glenn Nielson, a vice president of Husky Oil Company from Cody, Wyoming, became outraged. He was struck by what appeared to be the callous attitude of the photographers, who were merely filming the incident. "If you're not going to help it," Nielson said, "then why don't you put it out of its misery?"
- The sowmobilers left the scene, and after a brief caucus four of them returned, Nielson carrying a sixty-foot orange nylon rope. Seaquist was gone when they returned, so they fashioned a loop, tied it around the animal's horns, and walking gingerly out on the ice, tried to haul the animal to safety. At this point Seaquist returned and repeated her request that nature be allowed to prevail. She also warned the four men that they were endangering their own lives by walking out onto the ice. They ignored her. According to Nielson the bison had almost make it out of the water when the rope broke. "The sad thing," he said, "is that he [the bison] knew we were trying to help. He laid his head at my feet just exhausted." As it grew too dark for the rescuers to see, the attempt was abandoned. The temperature fell to -20F that night. In the morning the bison was dead, frozen into the ice. Coyotes and ravens soon descended on the animal. When the warmth of spring melted the river and freed the remainder of the carcass, a grizzly bear was observed feeding on the bison downstream. A shred of orange nylon rope was still fastened to its horns.
- Upon his return to Cody, Nielson wrote a letter to the right-wing radio commentator Paul Harvey, describing what he felt was the Park Service's cruelty. Harvey seized on the dramatic incident and, in three venom-filled broadcasts, tore into the Part Service's policy of nonintervention, calling officials "knee-jerk ecologists." "It is not a scientific question, it is a moral one," Harvey said. "The reason Jesus came to earth was to keep nature from taking its course." By J. Robbins quoted in Stone, 157-8.

Exercise Five: Should the Bison Be Saved?

- If you were there, would you join Nielson in attempting to save the bear?
- Choose an ethical approach from above that best supports the Park Service's position of nonintervention and construct an ethical argument in its support.
- Choose an ethical approach from above that best supports the position of intervention and construct an ethical argument in its support.
- Is Harvey right when he claims that the Park Service assumes this a scientific issue when in fact it is a moral/religious issue? Is nonintervention clearly the position that must be derived from the

Exercise Six: Stop Having Babies

- The platform of Deep Ecology uses the position that nature is intrinsically valuable to assert that human population must be drastically curtained.
- Examine the claim that nature is intrinsically valuable, that is, it has value on its own independently of its usefulness as a resource to serve human needs.
- Examine the additional premise that human activity is "excessive and the situation is rapidly worsening."
- Do you think that human population should be seriously curtailed to mitigate or eliminate the harmful impact of human activity on the environment?
- Norton would hold that the Deep Ecology platform is decidedly nonanthropocentric. Do you agree? Can, as Norton claims, a sustainable environmental policy be carried out on anthropocentric grounds?

What did you learn?

Take time to do a Muddy Point exercise on this module. What did you learn? (Something positive.) What was the muddiest point? (Something you didn't understand or disagreed with.)

Presentation on Module

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Presentation at Schoenstatt January 22, 2010 https://cnx.org/content/m32584/

Presentation Taped October 30, 2011 at Schoenstatt https://cnx.org/content/m32584/

Appendix

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EAC ToolKit Project

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Ethical Issues in Risk Management for Business

Note: These links will help you to explore different topics related to this module's contents.

- Epidemological studies are "natural" experiments. But allowing naturally occurring harms to continue without abatement and withholding information from risk bearers creates serious ethical problems.

Read the Tuskegee case as presented at the Western Michigan University

Ethics Center to learn about a nororious case in which

patient rights were egregiously violated for the sake of "continuing the experiment."

- Risk has meaning only in relation to the sociotechnical system in which it operates. Click on the link above to find out more about STS analysis and how it can be used to anticipate problems.
- Informed consent is a fundament right in the responsible management of risk. Click on the link to the Belmont Report to find out more about this right and its historical importance.
- The Online Ethics Center's definition of informed consent

includes the conditions necessary for fulfilling this right.

Word Version of this Template https://cnx.org/content/m19085/

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Introduction

Tilting at Windmills in Puerto Rico

The company, Windmar, has purchased land adjacent to the Bosque Seco de Guanica in Puerto Rico. Their plan is to build a small windmill farm to generate electricity that can be sold to the public utility, the Autoridad de Energia Electrica. Windmill technology is considered desirable because wind is an abundant, clean, and renewable resource. But local opposition has stalled this effort. Concerned citizens object, first of all, to being excluded from the public hearings that were held to assess Windmar's windmill project. Opponents also claim that windmill technology can kill birds on the endangered species list and damage the fragile ecosystems protected in the Boseque Seco de Guanica, an important nature preserve in Puerto Rico. They also suspect that the windmill project has the ulterior motive of attracting industrial development into southern Puerto Rico. What risks accompany windmill technology, and how can they be dealt with ethically?

The real price of cell phones

Recently, a series of microwave antennas have been built in Puerto Rico in the Atalaya hills between the western cities of Mayaguez and Moca. Different kinds of antennas serve different purposes; some provide citizens with cell phone service while others make it possible to track hurricanes and other weather developments. The problem is the impact on the people who live in the surrounding areas. Many antennas have been built within five hundred yards of private residences with some as close as one hundred yards. Local residents were not consulted when the decision was made to build them. They claim that they have suffered a disproportionate number of health problems caused by the EMFs (electro-magnetic fields) generated by the antennas. Construction and repair activities occur at all hours, day and night, disrupting sleep and other normal activities. How should the cell phone companies, government agencies, and other stakeholders respond to these health and safety concerns? How should the possible risks to health and safety associated with antennas be assessed and communicated?

No Copper Mines in Puerto Rico

Starting in the mid-1950's, several international mining companies have attempted to receive permission from the Puerto Rican government to construct mines for gold and copper. Orebodies located in the mountainous central region of the island, have attracted several proposals for mining projects ranging from large to small scale. Concerns about water pollution (produced by tailings or mining waste products), air pollution (accompanying the proposed copper smelting plants), and **disruption of the** agrarian lifestyle still alive in central Puerto Rico became focused into considerable political and environmental opposition. Several mining proposals were defeated as citizens' interest groups formed and intensively lobbied the government not to permit mining. One mining site, located in the Cala Abajo region, has been reclassified as a nature preserve to block further attempts at mining. Mining could benefit the areas around the proposed mining sites by generating much needed jobs and tax revenue. But these benefits come accompanied by increased risks to the environment as well as public safety and health. How should these risks be assessed? Under what conditions, if any, could they be deemed acceptable? What processes should be set into place by the government to ensure adequate public participation in determining whether these risks are acceptable? How

should risk information be communicated to a public which is isolated and still largely illiterate?

"No" to the Coal Plant

In the early to mid-1990's, a consortium of U.S. and Spanish power generation companies proposed an electricity-generating plant for the Mayaguez area that employed co-generation technology fueled by coal. Not only would this privately owned plant sell the electricity it produced to the Autoridad de Energia de Electrica; it would also sell the steam by-product to the two local tuna canning plants that had been operating in the area since the 1960s. But local opposition arose to derail the project. Coal is a non-renewable resource that produces noxious by-products that contribute to acid rain and global warming. Geologists pointed out that the plant would be located dangerously close to an active earthquake fault. Environmental groups raised concerns about water pollution, especially further deterioration of the already endangered coral reef in the Mayaguez Bay due to the discharge of the heated water employed to cool the components of the proposed plant. In televised public hearings, company engineers testified on design modifications to keep endangered species such as manatee from being sucked into the plant through water intake pipes. On the other side of the debate, the Puerto Rico energy utility, the Authoridad de Energia Electrica, predicted energy shortages beginning around the year 2000. (These warnings have been vindicated by the frequent brown-outs and black-outs that residents currently suffer through.) They also argued that the western part of the island needed its own energy-generating facilities to hold onto crucial industries like the textile and tuna canning plants located in the area. Finally, they turned to the use of coal to generate electricity as an effective substitute for petroleum which is used to generate most of the electricity used by Puerto Ricans. Since the rejection of the project, the textile industry has all but disappeared and one of the two tuna canning plants has relocated to Taiwan. Can government play the role of "honest broker" between private industry and a suspicious public? Should public utilities contract with private industry to meet energy and other infrastructure needs? What are the environmental risks of co-generating technology? How can these be responsibly communicated to the public? How should all stakeholders weigh environmental, safety, and health risks against infrastructure expansion and economic development?

Ethical Issues in Risk Management for Business

Each of these cases raises risk issues that cannot be settled by process alone but require substantive debate focusing on the fragile ethical values embedded in the surrounding socio-technical system. The stakeholders have at times worked together but more often engage in conflict over seemingly incompatible yet essential interests. Private industry has designed these projects to respond to real, market-based needs. For example, Puerto Rico desparately needs clean, renewable and sustainable sources of energy to protect its fragile environment and reduce its dependency on foreign oil. Yet other stakeholders, especially a public with complex and vital interests, have banded together to oppose these and other initiatives. Local residents demand a right to a livable environment, raise health and safety concerns, and assert civil rights based on distributive justice, free and informed consent, and due process. Past experiences with ambitious but poorly designed and executed business and government projects have consumed social capital and undermined public trust. Continuing development under these conditions has proven difficult. The Puerto Rican government has consistently been in the middle attempting to mediate between these contending parties. Can government play the role of "honest broker" and help lead conflicting stakeholders to political and social consensus? Can government lead the substantive ethical debate into applications of distributive justice, informed consent, and sustainable environmental value? Or should it step out of the way and let the public and private industry fight it out on their own? What role do free (or semi-controlled) markets have to play in mediating this conflict? This module will help you explore these problems through the prism of risk. You will study the different aspects of risk and learn about their ethical and social implications. The final objective is to help you manage risk ethically through responsible assessment, perception and communication.

What you need to know ...

Working responsibly with risk requires careful integration of substantive ethical issues, distinguishing different senses of risk, and mastering the skills required in morally responsible risk communication. In other words, it is more than just implementing a mechanical process that imposes unwanted consensus on disparate groups and individuals. (See Sandel for an

argument that past ethical controversies such as slavery had to be settled by means of substantive debates rather than procedural maneuvers.) Ethics is important to risk because scientific risk assessment is value-laden. Values permeate decisions such as choice of method as well as decisions on how to distribute the burden implied by the uncertainty involved in risk assessment and management. This section will introduce you to basic moral concepts involved in risk and offer information on how risk is assessed, managed, perceived, and communicated.

Responsible Risk Management: Associated Basic Moral Concepts

- 1. **Right**: A capacity of action that others are obliged to recognize and respect. A key right in the context of risk is free and informed consent. (See below)
- 2. **Duty**: The obligation to recognize and respect the essential capacities of actions of others. Duties are correlative to rights. For example, the duty to avoid paternalism in the management and communication of risk is correlative to the right of free and informed consent.
- 3. **Virtue**: Responsible risk management can also be formulated as a virtue. Virtues are traits that extend "deep down" into an individual's character. They include an orientation toward excellence in decision and execution, perceptual sensitivities that help to uncover moral relevance, and emotions/attitudes that help motivate decisions and actions oriented toward achieving excellence. For example, a responsible risk communicator has curiosity that drives understanding and appreciating risk, a concern for the well being of the risk bearer, and a strong desire to communicate risk information truthfully and clearly.
- 4. **Justice**: Justice can be generally defined as giving each his or her due. Distributive justice, in the context of risk, prescribes a fair distribution of the benefits and harms associated with taking a certain risk. Ideal pattern approaches argue that distribution should conform to a pattern such as **equality** (equal shares to everyone), **need** (greatest share to those with the greatest needs), and **merit** (greatest share to those who demonstrate superior merit). **Ideal pattern approaches** require continual redistribution by government through measures such as a progressive income tax. **Historical process approaches** prefer maintaining current patterns of distribution provided the historical

- process leading to them has been free of force or fraud. Justice in the context of risk lies in determining how the benefits and harms associated with risk are distributed, and how the uncertainty that permeates the risk assessment and management process is distributed among those involved.
- 5. **Responsibility**: Herbert Fingarette defines responsibility (in the context of criminal insanity) as (moral) response to (moral) relevance. Different senses of responsibility include causal, legal (vs. moral), role, capacity, and blame. Responsibility can be reactive when it focuses on the past and the assigning of praise and blame; or it can be proactive when it turns to preventing harm (minimizing risk) and realizing value.
- 6. **Trust**: The expectation of moral behavior on the part of others. Trust is built out of the social capital accumulated through successful interactions with others. It is consumed or undermined by those who choose to free ride on social cooperation, i.e., compete while others are cooperating. The prisoner's dilemma (see link above) provides a simplified model to show the fragility of trust (m17367).

Key Terms in Risk Practices

- 1. **Safety:** "A thing is safe if, were its risks fully known, those risks would be judged acceptable in light of settled value principles." (IEE 108)
- 2. **Risk**: "A risk is the potential that something unwanted and harmful may occur." (IEE 108)
- 3. **NIMBY**: This acronym stands for "Not in my backyard." Citizens often find the risks associated with a project or product acceptable only if these are located somewhere else, i.e., in another person's backyard. NIMBY has made it next to impossible for the U.S. DOE (Department of Energy) to find an acceptable permanent storage facility for nuclear waste.
- 4. **Free and Informed Consent**: The right to decide if a risk is acceptable based on access to pertinent information and absence of compulsion. The **Belmont Report** defines informed consent in the following way: "[that] subjects, to the degree that they are capable, be given the opportunity to choose what shall or shall not happen to them.

- This opportunity is provided when adequate standards for informed consent are satisfied." The Online Ethics Center spells out conditions necessary for fulfilling informed consent: (a) **disclosure** (of information to the patient/subject); (b)**comprehension** (by the patient/subject of the information being disclosed); (c) **voluntariness** (of the patient/subject in making his/her choice); (d) **competence** (of the patient/subject to make a decision); and (e) **consent** (by the patient/subject).
- 5. **Paternalism**: Often experts are tempted to act as overly concerned parents and take over the decision-making perogatives of the public because they (the experts) "know better." Paternalism, while well motivated, is based on the misconception that the public doesn't understand risk because it often reaches different conclusions on the acceptability of a given risk than the expert. But the public often appreciates risk from a broader, richer standpoint, especially if the expert has properly and clearly communicated it. As will be seen below, the public perception of risk is rational because it is predictable.

Dimensions of Risk

- **Risk Assessment**: The process of determining the degree of risk associated with a certain product or process using scientific methods such as epidemological study or animal bioassay. While using scientific procedures to gain a measure of exactness, risk assessment still brings with it a remainder of uncertainty that cannot be eliminated. A risk assessment issues into two uncertainties, the uncertainty as to whether the harm will occur and the uncertainty as to who (out of the many exposed) will be harmed. Ethics enters into the picture as stakeholders negotiate how to deal with and distribute this uncertainty. Responsible risk practice requires integrating the conflicting values and interests of the involved stakeholders in assessing, communicating, perceiving, and managing risk. It also requires a basis of trust that is difficult to build up given the diverse players that make up the risk taking and bearing situation.
- **Risk Management**: The political/social/ethical process of determining if a risk of a certain degree is acceptable given the settled value principles generally held in the community of the risk bearers.

Responsible risk management requires (a) assessing harm through the responsible exercise of scientific method and (b) communicating the assessed risk to those likely to bear it. Responsible risk management (i) honors rights such as free and informed consent and due process, (ii) avoids conflicts of interests in determining and communicating risk, (iii) conscientiously works toward a just distribution of risks and benefits, and (iv) avoids paternalism.

- **Risk Perception**: How people perceive risk differs from the strict, scientifically determined degree of risk. For example, risk perception factors in voluntariness, control, expected benefits, lack of knowledge, and dread of adverse consequences in working toward a judgment on the acceptability of a given risk by the community of risk bearers. Because the public perceives risk over this broad background of scientific, social, political, and ethical factors, it frequently arrives at conclusions at odds with judgments reached using strictly scientific methods. Those taking a paternalistic attitude toward the public take this difference as evidence of the irrationality of the public and the need for the experts to taken things into their own hands. However, the public attitude toward risk is intelligible and rational when this broader, risk perception perspective is taken into account.
- **Risk Communication**: This dimension focuses on how to communicate risk information to risk bearers in order to facilitate distributive justice, free and informed consent, and due process. Responsible risk communication requires translating scientifically determined information into a non-technical vocabulary. Analogies and comparisons help as does the use of concrete language and commonly understood images. But improper use of comparisions and analogies confuses the public and undermines trust.
- **Public**: "those persons whose lack of information, technical knowledge, or time for deliberation renders them more or less vulnerable to the powers an engineer wields on behalf of his client or employer" Davis

Assessing Risk

• **Epidemiological Studies**: We are constantly exposed to different risks that have become inherent in our socio-technical circumstances. These

ongoing, unintentional experiments are exploited through epidemiological studies which are designed to measure the correlation between exposure to risk factors and the occurrence of harm. For example, are those living close to EMFs (electro-magnetic fields generated by technologies like electrical power lines) susceptible to certain harms like leukemia? An epidemiological study would compare incidents of this disease occurring in a population exposed to EMFs with incidents of this disease occurring in a population, unexposed to EMSs. If there were a significant risk ratio (usually set at three times the incidents of the harm in the unexposed, control group) then this provides evidence that exposure to EMFs somehow causes leukemia. (Further study would be required to confirm this hypothesis and uncover the causal mechanism by which exposure produces the harm.) Epidemiological studies are difficult to carry out and are always accompanied by uncertainty due to the limitations of the methods employed. Typically, the harm may take years to become manifest after exposure. Finding a population stable enough to determine the effects of long term exposure is difficult because individuals frequently move from place to place. Such natural experiments also bring with them a great deal of "noise"; factors other than EMFs could be causing leukemia or EMFs could be interacting with other elements in the environment to cause the harm. Finally, there is the Tuskegee factor. In the notorious Tuskegee experiment, doctors refused to treat African Americans for syphilis in order to study the long term progression of the disease. Exposing a population to a risk factor without informing them of the potential harm in order to gain scientific information violates the right of free and informed consent and the duty not to harm.

• Animal Bioassays: Risk information can often be obtained by exposing animals to the risk factor and checking for emerging harms. While useful, animal bioassays are subject to several problems. Experimenting on animals raises many of the same ethical concerns as experimenting on humans. Utilitarians argue that animals merit moral consideration because they are sentient and can suffer. Animal experiments are thus subject to the three Rs: reduce, refine, and avoid replication. (See Bernard Rollins) Second, these experiments create two kinds of uncertainty. (a) Projections from animal to human

- physiology can lead researchers astray because of the differences between the two; for example, animals are more sensitive to certain harms than humans. (b) Projecting the results from intensive short term animal exposure into the long term can also introduce errors and uncertainty. Thus, as with epidemiological studies, there are uncertainties inherent in animal bioassays.
- Risk assessment, while useful, is burdened with uncertainty due to the limits of what we know, what we can know, and what we are able to learn within the ethical parameters of human and animal experimentation. Crucial ethical issues arise as we decide how to distribute this uncertainty. Do we place its burden on the risk taker by continuing with a project until it is proven unsafe and harmful? Or do we suspend the activity until it is proven safe and harm-free. The first gives priority to advancing risky activities. The second gives priority to public safety and health, even to the point of suspending the new activities under question.

Risk Perception

- The framework from which the public perceives risk is broader and richer than that of risk assessment. The following five factors influence how the public judges the acceptability of a risk assessed at a given magnitude.
- **Voluntariness**: A risk that is voluntarily taken is more acceptable than a risk of the same magnitude that taken involuntarily. Thus, driving one's car to a public hearing on the risks of a proposed nuclear power plant may be riskier than living next to the plant. But driving to the public hearings is done voluntarily while living next to the plant is suffered involuntarily. According to studies, a voluntary risk is as much as 1000 times more acceptable than an involuntary risk of the same magnitude.
- Control: Closely related to voluntariness is control. A risk under one's control (or under the control of someone trusted) is more acceptable than a risk of the same magnitude that is not under control. Charles Perrow, in Normal Accidents argues against nuclear energy technology because its design allows for components that are tightly coupled and interact with nonlinear patterns of causality. These two

- characteristics make it possible for small events to start chain reactions that issue into large scale disasters. Because these small events cannot be isolated (they are "tightly coupled") and because they interact unpredictably (they display nonlinear causality), they escape control and lead to unacceptable risks.
- **Perceived/Expected Benefits**: A risk of a given magnitude is more acceptable if it comes accompanied with substantial expected benefits. One takes the risk of driving to the hearings on the proposed nuclear plant because the benefits of getting crucial information on this project outweigh the risks of having a car accident. Riding a motorcycle is a risky venture. But the benefits received from this activity in the form of enjoyment make the risk more acceptable than a risk of the same magnitude accompanied with less benefits.
- **Unknown Factors**: A risk that is not understood is less acceptable than one that is well understood. Riding a bicycle is a risky venture but, because its risks are well known, it is more acceptable than other activities accompanied by risks of similar magnitudes. This factor is highly pertinent to EMFs (electro-magnetic fields). While EMFs are associated with certain illnesses like leukemia, their effects are not well known and are not understood by the public. This unknown element makes living near EMF producing technologies less acceptable.
- **Dread Factors**: A risk may be known and its causal relation to certain illnesses well understood. Nevertheless it may be less acceptable because the condition it causes is one that is highly dreaded. EMFs, because they have been associated with leukemia in children, are much less acceptable because of this "dread factor." The causes of radiation sickness are well known as are the stages of the illness. But because this kind of illness is highly dreaded, accompanying risks are less acceptable than other risks of the same magnitude with less of the dread factor. Again, compare crashing on a bicycle with coming down with cancer to get an idea of how dread permeates the perception of risk.
- **Against Paternalism**: Consider the possibility that predictability is one component of rationality. Then test this hypothesis in the cases presented at the beginning of this module. Can the risks posed by each project be examined in terms voluntariness, susceptibility to control,

expected benefits, unknown factors, and dread factors? If so, then the public perception of this risk is rational because it can be predicted and understood. Thus, even though members of the public might find other risks of the same--or even greater--magnitude more acceptable, these perceptual factors would render the public's judgment intelligible and predictable. If all of this is so (and you will be testing this hypothesis in the exercises below) then paternalism on the part of the expert would not be justified. Furthermore, these insights into how risk is perceived by the public should provide you with valuable insight into how to communicate risk to the public.

Responsible Risk Communication

- Telling the Truth: Certainly, responsible risk communication should start with the commitment to tell the truth. But the virtue of truthfulness is more complicated than it might seem at a first glance. For example, were an expert to tell nonexperts the whole truth this might confuse them, especially if the account is loaded with complex technical explanations and jargon. Truthfulness might require some simplification (holding some things back or putting them in different terms), judicious comparisons, and the use of concrete images. Thus, the virtue of truthfulness requires (a)understanding the audience and (b) outlining their perceptions, concerns, feelings, and needs. With this in mind, here are some factors that are useful in communicating risk responsibly and truthfully.
- **Know the audience**: What is their level of understanding, their needs, and their perceptions. For example, do they perceive the risk as voluntary, under control, accompanied with substantial benefits, accompanied by effects that are well known, and of a low dread factor? The risk perception framework described above will help you to communicate risk in a helpful and responsible manner.
- Take measures to avoid deceiving the audience: The gap between the expert (those in the know) and the public is sometimes quite large. This creates the temptation to fill that gap with less then truthful content. Avoiding deception requires more than just refraining from telling outright lies. It also requires taking measures to avoid subtle manipulation and unintentional deception.

• Guard against unintentional deception: (a) Be careful when using rhetorical devises. (b) Use risk comparisons and analogies to provide the public with benchmarks, not to persuade them that because they accept risk X they should accept risk Y. (c) Be sure to point out the limits of comparisons and analogies. (Driving to the public hearing is a risk of a greater magnitude than living next to a nuclear plant but this does not include key factors such as voluntariness, control, and expected benefits. (d) Avoid conflicts of interest. In exercise one below, you will be looking at an example of risk communication taken from the movie Silkwood. Think about whether this communication is reponsible and honest. Do the interests of the risk communicators coincide with those of the audience? Do the interests of the communicators bias the content of the communication in any way? (For example, does the upcoming vote to keep the union play a role in this risk communication act?)

What you will do ...

In this section, you will practice managing and communicating risk information. In managing risk information, you will practice how to empower, inform, and involve the risk-bearing public. In communicating risk, you will practice different ways of helping the public to deliberate on the acceptability of certain risks.

Exercise One

- Listen to the doctors communicating the risks associated to exposure to plutonium while working in the Kerr-McGee plant in the movie, Silkwood. How effective is this communicative act? (Explain your assertion.) How truthful is this communicative act? (Is truth about risk value-free scientific information or do values play a crucial role in our deliberations on risk? What kind of values are at stake here?)
- Listen to Charlie Bloom's presentation to the Milagro citizens' meeting on the economic and social risks associated with the Devine Recreational Center. Describe in detail the audience's reaction.
 Analyze both the content and style of Bloom's short speech. Does he facilitate or impede the process and substance of deliberation over

- risk? Rewrite Bloom's speech and deliver it before the class as if they were citizens of Milagro.
- Paul Slovic pictures a part of the risk perception process in terms of unknown and dread factors. In general, the higher the dread and unknown factors, the less acceptable the risk. Other factors that enter into the public perception of risk are voluntariness, control, expected benefits, and the fairness of the distribution of risks and benefits. Given this depicting of the public's perception of risk, how do you expect the Kerr McGee employees to react to the risk information being presented by the doctors? How will the citizens of Milagro react to the risk information they are receiving on the ethical, social, and economic impacts of the Devine Recreational Project?.

Exercise Two: Risk Perception

- Choose one of the cases presented above in the Introduction to this module.
- Describe those who fall into the public stakeholder group in this case. (See the above definition of "public")
- Identify the key risks posed in your case..
- Describe how the public is likely to perceive this risk in terms of the following: voluntariness, perceived benefits, control, unknown factors and dread factors.
- Given this perception of the risk, is the public likely to find it acceptable?

Exercise Three: Risk Communication

- You are a representative from one of the private business involved in the above case
- Your job is to communicate to the public (whose risk perception you studied in exercise two) the risk assessment data you have collected on the project in question
- Develop a strategy of communication that is based on (a) legitimate risk comparisons and analogies, (b) that is non-paternalistic, (c) that responds to the manner in which the public is likely to perceive the risk(s) in question, and (d) is open to compromise based on legitimate public interests and concerns.

Exercise Four (optional)

- Carry out exercises two and three using either the Milagro Beanfield
 War town meeting or the union meeting from Silkwood.
- Pretend you are Charlie Bloom and are charged with outlining the various risks that accompany the Devine Recreational Facility. The rest of the class, your audience, will play the role of the different stakeholders. These could include the (1) townspeople (owners of local businesses such as Ruby Archuleta's car body shop and the general store owner, Nick Real), (2) farmers (such as Joe Mondragon), (3) local and state law enforcement officers (such as Bernabe Montoya and Kyril Montona), (4) Ladd Devine Recreation Center employees (such as Horsethief Shorty who leads the construction crew), (5) local government officials (such as mayor Sammy Cantu) and state government officials (including the governor), and Ladd Devine himself.
- Give a short presentation. Then respond to questions and commentaries from your classmates who are working with the different roles outlined above.
- Take a vote on whether to go ahead with the Ladd Devine project.

What did you learn?

Business and Risk

You are a Corporate Ethics Compliance Officer developing an ethics program for your organization. How should your program respond to the ethics of risk issues discussed in this module? How should your corporation go about identifying and communicating risk factors to employees? How should your corporation go about identifying and communicating risk factors to other stakeholders such as customers, local community, and government agencies?

Appendix

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This optional section contains additional or supplementary information related to this module. It could include: assessment, background such as

supporting ethical theories and frameworks, technical information, discipline specific information, and references or links.

EAC ToolKit Project

This module is a WORK-IN-PROGRESS; the author(s) may update the content as needed. Others are welcome to use this module or create a new derived module. You can COLLABORATE to improve this module by providing suggestions and/or feedback on your experiences with this module.

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Value Profile: Justice

Justice is the first value in the University of Puerto Rico, College of Business Administration's Statement of Values. The purpose of this profile is to provide a more in-depth look at this important value. It will examine the core meaning of justice (justice as a fair agreement stemming from a social contract), its key features, different kinds of justice (distributive, retributive, compensatory, administrative), some useful frameworks in justice, cases involving justice, and a social contract exercise to convey the concept's core meaning. This profile will eventually be combined with profiles of the other four SOV values in a collection to be used in verifying and challenging ADEM's Statement of Values. It will be subjected to updates as the author continues research into this area and also has chance to assess in the classroom the success of the exercise the module offers.

Value Profile: Justice

The root or core meaning of justice is giving to each what is due.

Suppose you are moving and are trying to decide how to pay the three workers who are helping you. Giving each his and her due might simply consist of paying all three the same amount. This version of what is due is egalitarian. Or you might give a bit more to the worker whose oldest child is sick and needs expensive medical treatments. This version of giving each what is due is more necessitarian, that is, distributing on the basis of need. Or you could wait until the move has already occurred and give the most to the worker who did the most; this could be termed a merit-based approach to what is due. This example is presented in different sources. One is Beauchamp and Bowie (1988). **Ethical Theory and Business, 3rd Edition**. Upper Saddle, NJ: Prentice-Hall, p. 552.

Justice, then, in its core sense implies a distribution of something that accords with our common ideas of fairness, equality, merit, and impartiality.

Moving from this core meaning, justice classically divides into different senses. These are different senses distinguished by Manuel Velasquez (2006), *Business Ethics: Concepts and Cases*, *6th ed.* Upper Saddle River: NJ: Prentice-Hall, p. 88.

- 1. **Distributive Justice** examines how to divide and allot fairly the benefits and harms that result from social cooperation.
- 2. Retributive Justice concerns itself with the fair and impartial administration of punishment to wrongdoers.
- Compensatory Justice scrutinizes how we fairly compensate those who have been wrongfully harmed by others.
- 4. **Administrative Justice** looks at how rules are fairly and impartially administered in a social, political, or organizational context.

Justice, Hobbes, and the Social Contract

Many have worked to derive a conception of justice a version of the social contract. The exercises in this module have you look at justice as resulting from procedures derived from Thomas Hobbes (1588-1679) and John Rawls (1921-2002). (Hobbes selections come from Steven Cahn (editor), Classics of Western Philosophy, 2nd Edition. Indianaplis, IN: Hackett Press (1985): 361 and 368. Those on Rawls come from *Theory of Justice* or *Ethical Theory and Business* (edited by T Beauchamp and N Bowie, Upper Saddle, NJ: Prentice-Hall, 1988, pp. 559-567.

Hobbes sees the social contract as a procedure that takes us from a State of Nature (which is identical to a State of War) to Civil Society. Each contract has a *quid pro quo*, a mutually beneficial exchange. Individuals agree to lay down their natural liberties because these, combined with the acquisitiveness of human nature, have led to a state of war of all against all. To enforce this contract, each individual transfers his or her natural rights and powers to a sovereign who is charged with enforcing the contract they have made with one another.

This reduces to a formula: Rational Self-Interest + Knowledge of Human Nature + Natural Equality between all human individuals = a State of War. Why? Because human individuals are characterized individually by unlimited desire; without some check unlimited individual desire leads to conflicts between different individuals who desire the same thing.

The state of war is for Hobbes is highly undesirable. Life in the State of Nature is "solitary, poor, nasty, brutish, and short."

"Hereby it is manifest, that during the time men live without a common power to keep them in awe, they are in that condition which is called war; and such a war, as is of every man against every man....Whatsoever there is consequent to a time of war, where every man is enemy to every man; the same is consequent to the time, wherein men live without other security, that what their own strength, and their own invention shall furnish them withal. In such a condition there is no place for industry; because the fruit thereof is uncertain: and consequently no culture of the earth; no navigation, nor use of the commodities that may be imported by sea; no commodious building; no instruments of moving, and removing, such things as require much force; no knowledge of the face of the earth; no account of time; no arts; no letters; no society; and which is worst of all, continual fear, and danger of violent death; and the life of man, solitary, poor, nasty, brutish, and short." T. Hobbes. (1651). Leviathan: Edited with an Introduction by C. B. MacPherson Middlesex, England: Penguin Books, p. 186.

Key Terms

Rational Self-Interest: For Hobbes, humans want to stay alive. Rational self-interest dictates that the individual will do whatever is necessary to ensure continued survival.

State of Nature: The absence of laws, social norms, and customs. Each has the liberty to do what he or she wants. Nothing but the opposition of other human individuals stands in the way of an individual fulfilling desire. Hobbes, viewing human nature through the lens of physics and the natural sciences, characterizes state of nature as a social and political vacuum where one pursues whatever one desires. Because desires do not limit themselves, unless they are unlimited from the outside, they lead individuals to come into conflict with one another. The State of Nature is nothing other than a State of War of all against all.

Human Nature: Hobbes' conception of human nature has been termed "possessive individualism" by C. B. Macpherson.

- First, the individual is an atom isolated from other individuals and from any kind of social or natural context. Each human individual has a nature prior to and independently of society.
- Second, if this individualism is possessive, then it is characterized by unlimited desire. Humans are
 determined by their desires and passions. So if two or more individuals desire the same thing, then conflict is
 inevitable.
- Third, Hobbes assumes a natural equality among human individuals. This doesn't mean that everyone has the same powers or that no individual has more of any power than another. All it need mean is that even the most powerful among us is unable to so completely dominate others that he or she can lock a guarantee on peace and security.

Justice for Hobbes

In Chapter XV of the Leviathan, Hobbes defined justice: From that law of nature, by which we are obliged to transfer to another, such rights, as being retained, hinder the peace of mankind, there followeth a third which is this, that men perform their covenants made: without which, covenants are in vain, and are but empty words; and the right of all men to all things remaining, we are still int he condition of war. And in this law of nature, consistent the fountain and original of justice. for where no covenant hath preceded, there hath no right been transferred, and every man has right to everything; and consequently, no action can be unjust. But when a covenant is made, the to break it is unjust: and the definition of injustice, is no other than the not performance of covenant. And whatsoever is not unjust, is just. T. Hobbes. (1651). Leviathan: Edited with an Introduction by C. B. MacPherson Middlesex, England: Penguin Books, p. 201-202.

Rousseau's criticism

Rousseau (1712-17178) provides an insightful criticism of Hobbes. He argues that Hobbes did not dig deep enough in his effort to reach human nature prior to its reconstitution by civil society. The acquisitive desires that Hobbes uses to describe Human nature in its pre-social form are actually, themselves, the products of civilization itself. They are introduced along with the notion of private property. Rousseau sees this as a degeneration from original human nature, the noble savage whom he views romantically.

[Hobbes] had wrongly injected into the savage man's concern for self-preservation the need to satisfy a multitude of passions which are the product of society and which have made laws necessary. The evil man, he says, is a robust child. It remains to be seen whether savage man is a robust child....Moreover, their is another principle that Hobbes failed to notice, and which, having been given to man in order to mitigate, in certain circumstances, the ferocity of his egocentrism or the desire for self-preservation before this egocentrism of his came into being, tempers the ardor he has for his own well-being by an innate repugnance to seeing his fellow men suffer....I am referring to pity, a disposition that is fitting for beings that are as weak and as subject to ills as we are; a virtue all the more universal and all the more useful to man in that it precedes in him any kind of reflection, and so natural that even animals sometimes show noticeable signs of it. Rousseau, "Discourse on the Origin of Inequality, Part One," in Jean-Jacques Rousseau: The Basic Political Writings. Indianapolis, IN: Hackett (1987): 53.

Justice, Rawls, and the Veil of Ignorance

Rawls on Justice

In his 1971 book, **Theory of Justice,** John Rawls constructed a thought experiment to find the basic principles of **distributive** justice. Rawls begins with the central problem of distributive justice. The goods, harms, and risks that accompany social cooperation must be fairly and justly distributed. Three methods of distribution present themselves as leading candidates: equality, merit, and need.

- *Equality*: the benefits, harms, and risks of social cooperation are distributed equally among members of the social group.
- *Merit*: the greatest share goes to those who deserve it. Merit can be defined in terms of knowledge, skill, productivity or even moral virtue.
- *Need*: the greatest share goes to those who have the greatest need.
- Beauchamp and Bowie add distribution according to rights, effort, and societal contribution. Beauchamp and Bowie, **Ethical Theory and Business, 3rd Edition**, p. 44.

Rawls then constructs a thought experiment designed to solve this problem of distribution. Imagine a situation where a group of rationally self-interested individuals choose principles of distribution under a veil of ignorance. (This means that individuals will be making this choice unaware of their own special circumstances, for example, whether they will be rich or poor, born in a wealthy nation or in a developing country, endowed with natural talents or handicapped in some way, etc.)

- 1. Rational self-interest leads us to acquire as many primary goods as possible. These include (a) rights and liberties, (b) opportunities and powers, and (c) income and wealth.
- 2. Under the veil of ignorance, we pretend to know nothing of our situation. As Rawls puts it, under the veil of ignorance, "no one knows his place in society, his class position or social status, nor does any one know his fortune in the distribution of natural assets and abilities, his intelligence, strength and the like." (J. Rawls (1971). A Theory of Justice. Cambridge, Mass: Harvard University Press, p. 12)

The veil of ignorance channels rational self-interest toward an impartial and fair system of distribution. Without the veil of ignorance, those who are rich would gravitate toward a scheme of distribution that maintained and even enhanced their wealth. Those who were poor would opt for a scheme that redistributed the wealth of others to themselves. The scheme could also be shifted towards one's natural talents: if one were strong, one would choose a system of distribution biased toward strength; if one were intelligent, one would choose a system of distribution that rewarded intelligence; if one were male, one would choose a system that favored men. Rational self interest without the veil of ignorance would bias the principles of justice chosen. But the veil of ignorance pushes rational self-interest toward impartiality because the rationally self-interested individual must choose to protect all possibilities, not knowing in advance which one will apply.

With this in mind, Rawls' basic position can be summarized in the following manner:

1. Rational Self-Interest + Veil of Ignorance = Theory of Distributive Justice.

Distributive Justice, in turn, is captured by two principles: the Equal Liberties Principle (ELP) and the Difference Principle (DP)

- 1. ELP = Equal Liberties Principle: "First: each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others." "The basic liberties of citizens are, roughly speaking, political liberty (the right to vote and to be eligible for public office), together with freedom of speech and assembly; liberty of conscience and freedom of thought; freedom of the person along with the right to hold (personal) property; and freedom from arbitrary arrest and seizure as defined by the concept of the rule of law." (Rawls, A Theory of Justice, pp. 60-61)
- 2. DP = Difference Principle: "Second: social and economic inequalities are to be arranged so that they are both (a) reasonably expected to be to everyone's advantage [most especially to those most disadvantaged] and, (b) attached to positions and offices open to all...." (Rawls, A Theory of Justice, pp. 60-61) One further point on the difference principle requires emphasis: "social and economic inequalities, for example inequalities of wealth and authority, are just only if they result in compensating benefits for everyone, and in particular for the ;least advantaged members of society." (Rawls, A Theory of Justice, 14-15.)

The Equal Liberties Principle has priority over the Difference Principle so that equality becomes the default pattern of distribution; any departure from an equal pattern of distribution must have a strong, overriding justification. Moreover, the equal distribution of political liberties is, for Rawls, absolute and cannot be overridden. (Rawls, thus, overcomes what he sees as a weakness of utilitarianism that allows the overriding of basic rights and liberties to bring about the greatest good for the greatest number.) But, under the Difference Principle, a departure from equality can be justified in the economic sphere if all stand to benefit, most especially the disadvantaged. In this way, Rawls works toward a synthesis that captures the strengths of three patterns of distribution: equality, merit, and need.

Rawls' theory of justice has been intensely debated and scrutinized. From the libertarian standpoint, Nozick criticizes Rawls for developing a system of justice that sacrifices liberty for equality. Nozick argues that a patterned system of justice (like Rawls') must continually interfere with a distribution voluntarily reached to maintain a privileged pattern of distribution. (To put it crudely, Nozick argues that Rawls' system of justice would require continual transfer of wealth and goods from those who have more to those who have less. One such mode of transfer is, of course, taxation. So Nozick points out that under Rawls' system we would pay loads of taxes.)

Nozick provides an interesting example of how patterned systems of distribution interfere with liberty. Suppose we voluntarily transfer our money to Michael Jordan to see him play. We enjoy the show but now Jordan has a disproportionate share of the total wealth, as judged by our ideal pattern of distribution, namely, equality. So to restore justice, we take back some of Jordan's money—through taxation—and redistribute it to those who gave it to him in the first place. Overriding the initial, voluntary transfer by a second involuntary transfer doesn't make sense to Nozick. Moreover, he finds it wrong because it sacrifices liberty to equality (or some other privileged pattern of distribution). For Nozick, the current pattern of distribution is not important. What matters is how it came to be. If the current pattern was produced by a just process, then it is a just distribution no matter how unequal it may be. Nozick defines this just process as repeated applications of justice in acquisition (we made it or added value to it) and justice in transfer (somebody bought it from us or received it as a gift without force or fraud). (This analysis loosely follows R Nozick. (1974) **Anarchy, State, and Utopia**, New York: Basic Books, pp. 149-154, 156-157, 159-163, 168, 174-5, 178-179, 182.) These selections can be found in Beauchamp and Bowie. (1988). **Ethical Theory and Business, 3rd Ed.** Upper Saddle, NJ: McGraw-Hill, pp. 567-570. The Wilt Chamberlain example has been updated to the Michael Jordan example.)

The table below summarize much of the discussion in this module to this point. It also refers to some point that are beyond the scope of this module. For example, Sandel provides a communitarian criticism of Rawls. Rawls' self can be detached from its social surroundings and defined in terms of rational self-interest. Sandel argues that justice must confront more robust selves or individuals who are inseparable from their social context. Hence, the social contract itself (or Rawls' original position) must always factor in the projects and social relations that partially constitute who we are. Second, Walzer argues that there are spheres of justice that correspond to different practical areas; each sphere has its own distinct principle or procedure of distribution and these different procedures cannot be reduced to one all-inclusive view. So economic goods can be distributed consequentially but political goods must have some kind of right-based or deontological procedure. Third and finally, Nussbaum and Sen see justice as following from a more robust conception of human dignity that is filled out by substantive freedoms or what they term capabilities. M. Nussbaum. (2006). Frontiers of Justice: Disability, Nationality, species Membership. Cambridge, Mass: Belknap Press.

Root meaning	Key Features	Kinds and Senses	Useful Frameworks	Cases
Giving each what is due—places justice under the debits/credit metaphor	Pattern Approaches: Justice = the conformity of current distribution to an ideal pattern • Equality or equal shares of benefits and burdens • Merit or the most to those who merit or deserve it • Need or the most to those who have the greatest needs	Distributive: dividing burdens and benefits of social cooperation fairly.Retributive: fair and impartial administration of rewards and punishments	Social Contract Version One • Agents pursuing self-interest • Negotiating out of condition of equality in SN • Agreement reached among parties exchanging liberties to secure rights represents a just procedure	Hughes • Doo pro vict wro dist ade mea

Root meaning	Key Features	Kinds and Senses	Useful Frameworks	Cases
Justice as fairness and justice as equality • First emphasizes impartiality • Second emphasizes equality	Historical Process View: if the current distribution results from a process free of coercion and deception, then it is just. • Justice as Entitlement results from repeated applications of • Justice in acquisition (mixing one's labor with an object) • and Justice in transfer (voluntary exchange of goods between individuals) Michael Jordan is entitled to his larger share if collectively we have transferred our money to him to watch him play.	Compensatory: fair compensation for wrongful injuries Administrative: Impartial and fair administration of rules and procedures (consistent with due process)	Rawls Version: Social Contract under veil of ignoranceRational Self-Interest (maximize primary goods) + Veil of Ignorance (Ignorance of natural talents, gender, social class, economic and political status, etc.) = Procedural Justice as spelled out in two principles:1.Equal Liberties Principle: "Each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others."2. Difference Principle: "social and economic inequalitiesare just only if they result in compensating benefits for everyone, and in particular for the least advantaged members of society." (Rawls, Theory of Justice in Beachamp and Bowie Business Ethics, 561.)	Incident at • Do maque representation of the period of th

Root meaning	Key Features	Kinds and Senses	Useful Frameworks	Cases
Metaphor: Justice emerges out of a social contract • agents with rational self-interest (utility maximizers) • mutually beneficial exchange or quid pro quo • knowledge and comprehension of terms of quid pro quo • Voluntary (Free and informed Consent)	In general processes of acquisition and transfer must be liberty-preserving or free from coercion and deception	Justice can be treated as a right essential to autonomy, vulnerable to a standard threat and feasible in that it does not deprive the correlative duty-holder of anything essential Utilitarianism : Justice is intrinsically valuable but only as a part of happiness (especially happiness of the greatest number)	These two principle allow for maximizing primary goods (=rational self- interest) under a veil of ignorance according to RawlsPrimary Goods: • rights and liberties • opportunities and powers • income and wealth	• Justif under history proce. • Justif under equal merit
Justice has been characterized in different ways as a • right essential to autonomy • good essential to human happiness • virtue or disposition of character of human agent		Spheres of Justice (Walzer): There are several distinct spheres of practical activity, each with its own rule of distributive justice. (Examples: Educational, Political, Economic)		One Lapto Child • Do X lapto provi mean reduc digita between devel devel

Exercise A

Introduction

As you have seen in the material above, justice can be at least partially derived from an imagined social contract where rationally self-interested individuals negotiate how society should distribute access to primary goods such as (1) liberties and rights, (2) opportunities and powers, and (3) wages and wealth. Social contract theory thus devises a negotiation whose end result generates principles and procedures of distributive justice. In this activities section, you will carry out two different versions of the social contract, one without what Rawls terms a veil of ignorance and the other under the veil of ignorance.

First, you will participate in a natural lottery. From a hat (or box) you will draw one of the following: **The Natural Lottery**

- You (or your group) has been born as a woman
- You (or your group) has been born as Michael Jordan. (You have talents that would make you an excellent basketball player if these are properly developed.
- You (or your group) has been born as Albert Hirschmann, a German of Jewish dissent who comes of age in the 1930s in Nazi Germany. You have extraordinary mental talents and have a good preliminary education but are now living in a world where people of your descent are the objects of persecution.
- You (or your group) has been born as a graduate from the Harvard MBA program.
- You (or your group) has been born in a nation that occupies what is now called the "Global South." (Haiti would be a good example.)
- You (or your group) has been born as a Black man who has always lived in Detroit, MI.

Some key assumptions to guide you all through the negotiation process.

- Your group has interests that need to be protected in this process. You can try to integrate interests, compromise interests, or tradeoff interests with one another.
- You and the other parties to the contract are rationally self-interested. As such you are interested in
 maximizing access to Primary Goods such as rights and liberties, opportunities and powers, income and
 wealth
- You are willing to accept constraints to your primary goods but only if other groups also do so. In other words, you should not unilaterally give up your group's access to any primary goods since these compose rational-self interest and are also essential to survival.
- This contract is supposedly neutral as to different conceptions of the self, for example, whether the self is essentially or non-essentially related to any community. But it tends in the direction of what MacPherson terms "possessive individualism." In this case, there is a human nature that is prior to an independent of any relation to other individuals or to a community. Hobbes reduces this human nature to acquisitiveness or unlimited desire. Locke and Rousseau see a "fellow feeling" as balancing or checking acquisitive desire.

Negotiate a new social contract with the other groups.

Negotiate a contract whose structure represents the best procedure for distributing goods, risks, and harms among the different stakeholders listed in one. Be prepared to defend your contract against claims that it privileges one of these groups over another.

Begin by answering the following questions:

- 1. What are your group's interests, needs, or desires?
- 2. Does your group have its fair share of primary goods: (1) Liberties and Rights, (2) Opportunities and Powers, (3) wealth and income
- 3. Are your interests/access to goods being met under the current system of distribution?
- 4. If not describe/prescribe a redistribution process to give your group what is "its due."

Exercise B

- 1. Now, renegotiate this contract under a veil of ignorance. The same classes will emerge in the system of justice you are creating by your contracting: Political leaders (legislators, judges, mayors, etc); Wealthy Individuals; Individuals with High Intelligence; Individuals with Low Intelligence; Poor); Members of Minority Groups; Women; Men. Only now, your task will be to negotiate a procedure of distribution under a veil of ignorance. You will enter into this system and come to occupy one of these roles, but at this point of negotiation, you do not know which of these roles.
- 2. As in Exercise A, you are negotiating on the basis of Hume's circumstances of justice:
 - Each group has interests that need to be protected in this process. Different group interests can be reconciled through compromise, integration, or tradeoff.
 - You and everyone else are rationally self-interested. As such you are interested in maximizing for your group Primary Goods such as rights and liberties, opportunities and powers, income and wealth.
 - All negotiating parties are equal. But the roles bracketed by the veil of ignorance are not equal. How would you take this into account in the negotiation?

- Obviously your position will be constrained by the other parties in the negotiation. But, because of the veil of ignorance, you don't know how that constraint will take place. What kind of negotiation stance can you take under the veil of ignorance? Again, remember that you want to maximize your acquisition of primary goods (rights and liberties, powers and opportunities, wealth and income). But this maximization cannot be brought about by privileging any of the roles mentioned above. You may be rich but you may be poor; you may be smart but you may be not so smart; you may be a man but you may be a woman. How do you insure maximize access to primary goods under these conditions?
- This contract is supposedly neutral as to different conceptions of the self, for example, whether the self is essentially or non-essentially related to any community. But it tends in the direction of what MacPherson terms "possessive individualism." In this case, there is a human nature that is prior to an independent of any relation to other individuals or to a community. Hobbes reduces this human nature to acquisitiveness or unlimited desire. Locke and Rousseau see a "fellow feeling" as balancing or checking acquisitive desire.
- 3. Negotiate a new procedure for distributing primary goods, risks, and harms under this veil of ignorance. Describe in detail your procedures.

Exercise C

- 1. Compare the procedure you developed in Exercise A with the pattern based approach of Rawls. Did you come up with something like the Equal Liberties Principle and the Difference Principle? Compare your procedure with Nozick's Historical Process procedure. Which comes closest to the Hobbesian conception of distributive justice?
- 2. Compare the procedure you developed in Exercise B with the pattern based approach of Rawls. Did you come up with something like the Equal Liberties Principle and the Difference Principle? Compare your procedure with Nozick's Historical Process procedure. Is this process compatible with a negotiation under the veil of ignorance? Finally which theory seems most compatible with your negotiation in Exercise B, the pattern based approach or the historical process approach?

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Value Profile: Responsibility

This module profiles the value, responsibility. After presenting its root metaphor, it provides a discussion of key features, kinds and senses, and useful frameworks. Responsibility is a complex value. The route this module takes through this complexity is to pull together its different senses and kinds as variations of "response to relevance." Two exercises at the end will provide an anchor for students to work with responsibility's root meaning and to see how it develops and changes as it appears in different cases. This first publishing is subject to revision as author gathers assessment data and carries out further research into moral responsibility.

Introduction: The Root Meaning of Responsibility

The College of Business Administration at the University of Puerto Rico at Mayaguez has recently adopted a Statement of Values. Rather than allowing this document to become static, this community is committed to challenging the Statement of Values. The first challenge, brought about by students, was to translate the Statement of Values into Spanish. (The original was drafted in English in order to be integrated into Business Administration's efforts at AACSB accreditation.) This module forms part of a series of modules that profile in detail each of the constituent values of Business Administration's Statement of Values: justice, responsibility, respect, trust, and integrity. Its purpose is to provide the basis for a conceptual challenge to the Statement of Values. Different constituents or stakeholders of Business Administration, students and staff, have expressed interest in more sharply distinguishing key values (e.g. trust and responsibility) and in exploring the overlap and distinctions between values (e.g., integrity and responsibility). This module profiles responsibility. Others will profile the remaining values, justice, respect, trust, and integrity. Finally, an introductory module will introduce students to value-based decision making while a concluding module will present a value realization framework taken from software engineering. This module profiles responsibility by providing its root metaphor, key features, kinds and senses, and useful frameworks. It concludes with exercises designed to help students understand responsibility's root metaphor, response to relevance, and how it has been metaphorically projected onto increasingly "higher" moral spaces, moving

from the negative to the positive, the minimal to the exemplary, and the reactive to the prospective.

Root Meaning: Response to Relevance

Herbert Fingarette's formula, "responsiveness to essential relevance" pulls together two strains used to test for criminal insanity, the cognitive test which lies in the ability to appreciate the moral quality of one's actions and the volitional test which lies in the ability to act on one's perception of moral relevance. This module converts the test for legal competence, "responsiveness to essential relevance," into a the root metaphor for moral responsibility, namely, "(moral) responsiveness to essential (moral) relevance." Moral responsibility brings together two skills. First, the responsible agent has the ability to zero in on the morally relevant aspects of a situation. This comes from cultivated emotional and perceptual sensitivities. (You are sitting on a crowded bus and begin to feel empathically the uncomfortableness of the elderly lady standing in the center.) Second, while keeping the morally relevant aspects in focus, the responsible agent is able to design and execute a morally responsive action that answers to the moral relevance in a situation. (You rise from your seat in the bus and offer it to the elderly lady.) This volitional ability requires cultivating powers of control, skill and knowledge. The root meaning of responsibility is, thus, (moral) responsiveness to essential (moral) **relevance.** See Fingarette, The Meaning of Criminal Insanity, 186-7.

Metaphorical Structure

Responsibility is metaphorically structured. Metaphor, for Johnson and Lakoff, is more than just a figure of speech. It is a projection of meaning and structure from one domain, a familiar experience termed the **source domain**, onto another less familiar domain termed the **target domain**. Seeing the unfamiliar in terms of the familiar or extending existing meaning and experience to cover new regions, represents, for Johnson and Lakoff, a fundamental imaginative activity. So, our experience of physical forces and their interactions is encapsulated into the image schema, stimulus-response. Then this basic structure is projected onto the moral domain: stimulus-response becomes perception of relevance-response to relevance. This projection doesn't merely repeat the original experience; it does not reduce the moral to the physical. Stimulus-response is expanded by the insertion of

moral content. Stimulus becomes sensitivity to what is morally salient in a situation; we use perceptual and emotional sensitivities and skills to zero in on the moral aspects of a complex situation. Response, when projected onto the moral domain, is no longer unthinking, automatic; now it becomes the formulation of action that is calibrated to moral salience. This metaphorical structure of responsibility is subject to further elaborations. As you will see in the exercises below, responsibility begins as a punitive response to failure to achieve the minimally moral. We blame an engineer for an accident when it results from her failure to exercise even minimal due care in the design and testing of a product. But, through repeated metaphorical projections, moral repsonsibility is repeatedly elaborated onto higher and higher moral spaces as the pursuit of excellence, not just the avoidance of blame. In short, the metaphorical elaboration of the root meaning of responsibility allows us to see continuity between its negative, reactive, and blame-center forms and more advanced positive, proactive, and supererogatory praise-worthy forms. Just below is a slide that taken from a presentation given by the author on "Teaching Moral Responsibility" at the annual meeting of the Association of Practical and Professional Ethics, March 2012; it shows the elaboration of moral responsibility through the repeated projections of the image schema stimulus-response or the experience of physical force and its interactions. (This account of responsibilty as a metaphor is taken from Mark Johnson, The Body in the Mind, p. 14. See other Johnson references listed below.)

Image schema: Physical stimulus "evokes" a reflex response (Built upon Johnson, BIM)

Metaphor: Image schema (= source domain) is projected onto the abstract moral realm (=target domain)



Source domain (physical force and interactions) has "internal structures that give rise to constrained inferences" in target domain (abstract moral realm) (Johnson, MB, 144)

Positive and Negative Senses of Responsibility

Negative Rsponsibility

The negative sense focuses on assigning blame for the untoward. (Untoward means something negative like harmful or unduely risky, etc.) This sense of responsibility works, primarily, from the threshold of the morally minimum. If you are below this threshold, several things happen: you are subjective to reactive attitudes (resentment, indignation, guilt), blame or approbation, and punishment. It is this sense that Bradley had in mind when he asserted that "repsonsibliity is necessarily connected to punishment." In this domain, the goal is to stay out of trouble which is the same as staying above the minmally moral. Good enough to stay out of trouble but not really good. (Hobbes, in Calvin and Hobbes, tells Santa Clause that he has not committed any murders or robbed any banks this year. Hobbes tells him that this might not be enough; not doing wrong does not fully constitute doing good.)

Positive Responsibility

Positive/proactive responsibility focuses on preventing harm and striving for supererogatory value-realization. You are working on an assembly line and see your coworker unconsciously taking a risk that could, under the right configuration of events, cause an accident. You make him aware of this risky habit and work with him to change it all the while taking care not blame him or attribute it to him as a fault. Your coworker could, and at least initially probably will say, that it is none of your business. But you make it clear that you are doing this because you are concerned and want to work with him to avoid an injury. More and more, companies are working to take injury prevention out of the negative and punitive stance and make it part of an approach that emphasizes non-fault prevention. But even more than prevention, positive responsibility can lie int he pursuit of the supererogatory. Here one takes responsibility even if prior to the act of commitment, it was not not obligatory. One delivers an unexpected good work or even offers a sacrifice of an important interest in the pursuit of an excellence. Positive responsibility sets behind itself issues of punishment and blame and recasts itself as the pursuit of excellence. In its most positive sense, responsibly becomes a virtue. (Pritchard, Harris, and Rabins discuss positive senses of responsibility in Engineering Ethics: Concepts and Cases 99-116. 2nd Edition. See also William F. May, "Professoinal Virtue and Self-Regulation," in ethical Issues in Professional Life, Oxford University Press, 1988. Finally see John Ladd "Bhopal: An Essay on Moral Responsibility and Civic Virtue" in **Journal of Social Philosophy** Vol. 22(1):73-91.)

Moral Responsibility and the Law

Moral responsibility cannot be reduced to legal responsibility. Yet, as Fingarette's investigation of criminal insanity shows, the two overlap and frequently compliment one another. Here it is absolutely essential to emphasize one fundamental difference. Legal responsibility focuses on the boundary between what is above the threshold of the minimally moral and what falls below. Moral responsibility begins with this minimal threshold or boundary but then proceeds to outline higher regions of what can be termed exemplary or supererogatory space. Another way of putting this is to hold that while moral responsibility can reflect legal responsibility by laying out

the gateway between the blameworthy and the acceptable, it can also be formulated as a virtue or an excellence. Legal responsibility remains necessarily connected with blame and punishment. Moral responsibility at some point leaves these behind as it becomes associated with different morally reactive attitudes such as gratitude, admiration, and pride.

Responsibility under Civil Law

- A Tort is a wrongful injury. To prevail in a tort one must prove negligence, recklessness, or intent.
- Negligence emerges out of the background of the normal or reasonable where due care is exercised. In other words, it arises from the failure to exercise due care.
- Recklessness goes a step further. One consciously risks a harm but does so in pursuit of another intention or goal. So you may drive recklessly through the university but justify--in your own mind--this risk incurred on others because you are late to your job interview.
- Intent is the worst of all three. Here the harm in question forms a central part of the agent's intention. The employee fired from his job intentionally introduces a virus into the workplace computer network shutting it down and producing financial loss. Injury intentionally brought about not only triggers compensation to make the victim whole; it may also trigger punitive damages, an invasion of civil law by criminal law.

An interesting debate has developed in the field of engineering ethics about standards of due care. Larry May sets forth a standard of minimal care which is a threshold below which an engineer cannot fall without incurring negligence. While the law is adept at establishing a minimal level of acceptable care, engineers as professionals should be held to higher standards. Hence, Harris, Pritchard, and Rabins in an influential textbook on engineering ethics, Engineering Ethics: Concepts and Cases, argue for higher standards of care such as normal or reasonable care, good works, and exemplary care. Engineers should be encourage to explore higher levels of care and responsibility; but this is held back by the specter of blame. It is certainly appropriate to hold engineers responsible and blameworthy for failure to live up to minimum standards of care and practice. But above this level, when should blame drop out. Certainly engineers who fall below

reasonable or normal standards exhibit moral deficiency. (The term comes from Ladd.) But what about taking on tasks that are above and beyond the call of duty? Suppose an engineer elects not to bring about a good work or make a substantial self-sacrifice to obtain a community good. Certainly such an action cannot be blameworthy since it falls well above the minimum threshold of acceptable practice. Nor does it seem to admit of moral deficiency. Hence, as responsibility is projected into increasingly positive and supererogatory space, what terms should we employ to replace blame, punishment, and moral deficiency? See Martin Curd and Larry May, "Professional Responsibility for Harmful Actions" in **Module Series in Applied Ethics**, Center for the Study of Ethics in the Professions, Illinois Institute of Technology Kendall/Hunt, 1984. See also **Engineering Ethics: Concepts and Cases**, Chapter 5.

Criminal Responsibility

- This area of the law applies to human individuals.
- To prevail in a criminal trial, one must first prove **mens rea** or a guilty mind. This is essentially an intention to break the law, to commit the crime in question.
- It is also necessary to prove that the target of a criminal suit have actually committed the guilty, law-breaking action, termed an **actus reus**.
- Finally, it is necessary to prove that the **mens rea** caused and guided the execution of the **actus reus**

Back to O.J. Simpson

• Reflecting on the trial of O.J. Simpson can help distinguish burden of proof in a civil and criminal law. Burden of proof is what the plaintiff has to prove to prevail against the accused or defendant. In a criminal trial, the burden of proof is set quite high. (Why do you suppose this would be?) The prosecution has to prove the defendant guilty "beyond a reasonable doubt." It is lower in a civil trial where the plaintiff only has to prove the case against the defendant by establishing a "preponderance of evidence." This is largely quantative; if 51% of the evidence falls on the side of the plaintiff, then the case against the defendant stands.

- OJ Simpson was found innocent in the criminal trial. The prosecutors were unable to establish his guilt beyond a reasonable doubt.
- But in the civil trial, his accusers were able to accumulate a preponderance of evidence against him. The difference in burden of proof thus explains why Simpson lost the civil trial but won the criminal trial.

Corporate Responsibility

While this is not the place to discuss this topic in detail, a few things can be said of corporate responsibility in summary. This notion, to say the least, is controversial. Much of this follows from the characteristics of criminal responsibility. To be criminally responsible, one must have a guilty state of mind (mens rea), carry out a guilt or law-breaking act (actus reus), and there must be a close connection between the two such that the mens rea guided the actus reus in its design and execution. But to attribute moral responsibility to a corporation would be to anthropomorphize it, to attribute to it a personality that would include mental states and body that existed above and apart form the minds and bodies of its members or employees. One ethicist, John Ladd, warns that this stretches to a breaking point, the thin concept of moral personhood; applying this to corporations empties personhood of its content and renders the concept ineffective. Or as John Danley puts it, there is nothing wrong with the anthropomorphic bias (read focus or meaning) of moral concepts such as responsibility, agency, and personhood. See Manuel Velazquez, "Why Corporations are Not Morally Responsible for Anything They Do," Business and Professional Ethics **Journal**, Vol. 2, No. 3: 1-18.

Nevertheless, there are credible arguments for corporate responsibility based on the premise that attributing responsibility to corporations does not preclude holding human individuals responsible. Peter French argues that under certain conditions, the actions of human individuals can be redescribed as corporation actions. The "device" that "licenses" this redescription is called a Corporate Internal Decision Structure or CIDS. (See French, Collective and Corporate Responsibility. Complete reference below.)

Constituents of CIDS

- **Corporate goals**. These are either objectives found in the charter or informal ends that can be uncoveed by becoming immersed in the day to day operations of a corporation.
- Corporate decision making and recognition procedures. These compose the grammar of corporate actions. Included would be procedures for soliciting travel funds, standard operating procedures, hiring and firing practices and other procedures that are followed for routinely corporate acts. These are at the center of attributions of corporate responsibility for these procedures are the ways in which we can see that an action has been authorized by the organization within which and for which it was performed.
- **Corporate roles**. Was the action performed by an individual designed to carry out a corporate role or was this action performed by the individual in some other capacity?
- Corporate Organizational or Management Systems. These systems display the relations of the corporate roles and the individuals occupying them. Usually portrayed by the corporate flow chart, these can display any number of kinds or types but two that come to mind. In hierarchically structured organizations power flows down the chain of command while information flows from the bottom-up; in horizontally organized corporations, power is distributed across relatively autonomous interdisciplinary work teams, each of which is designated responsible for the performance of certain tasks.

Kinds of Responsibility

The root metaphor of responsibility is "response to essential relevance" or "response to relevance." But this root metaphor has been used to structure different moral, legal, social, and other practical domains. The result are several different senses of responsibility. This section will help you sort out some of the different senses by providing brief, provisional definitions of causal, capacity, blame, role, and corporate responsibility.

• **Causal Responsibility**: Physical motions or events produce other physical motions or events. The hurricane blew the panel off the roof and caused other damage to the house.

- **Capacity Responsibility**: Conditions for attributing an action to an agent for the purposes of assigning moral praise or blame.
- **Blame Responsibility**: Blaming individuals for their actions, attitudes, or characters that result in untoward or negative consequences
- **Role Responsibility**: To stand committed to realizing the values, goods, or interests around which a social, occupational, or professional role is built or oriented.
- Corporate Responsibility: The legal and moral practice of treating corporations as moral agents (not necessarily as persons) and holding them accountable or answerable for their actions. Corporate moral responsibility should not exclude attributing moral responsibility to individuals for their actions. Yet, under special conditions, the actions of individuals can be re-described as corporations or re-description can reveal a corporate dimension or aspect to individual actions.

There are different accounts of types of responsibility in H. L. A. Hart, "Responsibility and Retribution," in Computers, Ethics and Social Values, Deborah G. Johnson and Helen Nissenbaum, Eds. Upper Saddle River, NJ: Prentice Hall, 1995, pp. 514-525 as well as K. Baier, "Types of Responsibility," in The Spectrum of Responsibility, Peter A. French, Ed. New York: St. Martin's, 1991, pp. 117-122.

Useful Responsibility Frameworks

Responsibility has positive and negative senses. In its negative sense, responsibility is the practice of assigning blame and setting the stage for punishment as a means of discouraging modes of action that lead to bad results. But the positive sense--so to speak--pivots off this negative sense and reconstructs the negative and reactive as positive and proactive. (More on this below.) This section presents F.H. Bradley's conditions of imputibility, requirements that must be in place in order for us to hold one another responsible for our actions and their results. Combining the perspectives of Bradley and Strawson, we could say that one fits into the **participant attitude** if one satisfies the conditions of imputability, that is, self-sameness, moral sense, and ownership. Failing this, one could still be in the participant perspective but, due to special circumstances, be unable (temporarily) to act responsibly. But Strawson's **objective attitude** is more

fundamental and applies to children, the disabled, and the insane. In this case, we are dealing with individuals who are incapable of fulfilling the conditions of imputability, especially self-sameness and moral sense. In this case, the individual falls outside the practice of responsibility, the participant attitude, and into what Strawson terms the objective attitude. We can treat such an individual as "as a possible predictable entity 'to be managed or handled or cured or trained; and perhaps simply to be avoided." (Margaret Urban-Walker in **Moral Repair** quoting--in part--Strawson, "Freedom and Resentment."

Capacity Responsibility (Conditions for Imputing or Assigning Responsibility)

- **Self-sameness** (Identity): The agent caused the action and the agent's identity persists or continues from the moment of act to the moment of accountability. F.H. Bradley: "I must be throughout one identical person. We do not say, 'He is not the same man that he was,' but always in another sense, to signify that the character or disposition of the person is altered." **Ethical Studies**, 5
- **Moral Sense**: The agent has skills pertinent to honing in on moral relevance and collecting thought, emotion, and will into responsive action. As Bradley puts it, "Responsibility implies a moral agent. No one is accountable, who is not capable of knowing (not, who does not know) the moral quality of his acts. Wherever we can not presume upon a capacity for apprehending (not, an actual apprehension of) moral distinctions, in such cases, for example, as those of young children and some madmen, there is, and there can be, no responsibility because there exists no moral will." **Ethical Studies** 7
- Ownership: Minimally, this condition requires the absence of ignorance and compulsion. As Bradley puts it, "it [the act] must have belonged to me--it must have been mine....The deed must issue from my will; in Aristotle's language, the arche must be in myself. ["Arche" is the Greek workd for beginning or principle.] Where I am forced, there I do nothing....Not only must the deed be an act, and come from the man without compulsion, but, in the second place, the doer must be supposed intelligent; he must know the particular circumstances of the case;;;;If the man is ignorant, and if it was not his duty to know...then the deed is not his act." Ethical Studies, 5-6.

- Ignorance and compulsion are not excusable if the they result from past, negligent actions. For example, if my failure to find crucial information in the past--"I don't want to know..."--caused my present ignorance it is not excusable. If my past actions and choices got me into the present compelling situation, then I am also responsible.
- Bradley's definition of compulsion is, roughly, the production in an individual of a state of mind or body that is contrary to his or her actual will. Holding a loaded gun to my head and telling me to sign the contract, is compulsion because the fear it produces in my mind leads me to an action that, absent the gun, I would not do. Tripping me produces a state of body--falling--that is contrary to my actual will of standing straight.

More on Strawson

- Participant reactive attitudes: "What I have called the participant reactive attitudes are essentially natural human reactions to the good or ill will or indifferences of others towards us, as displayed in their attitudes and actions" Strawson, "Freedom and Resentment," 10-11. For Strawson, responsibility arises when we hold one another responsible for living up to certain standards and when we respond with "reactive attitudes" when there is a failure to live up to these standards.
- **Objective attitude**: "on the other hand, [the objective attitude] withholds subjecting oneself and others to reactive attitudes. In cases of insanity, childhood, or some other relevant deficiency, the individual does ot fit in the network of relations supported by reactive attitudes." "Freedom and Resentment" 18-19.
- Examples: Resentment, Indignation, Shame.
- Positive Correlates: Gratitude, Admiration, Pride

Responsibility as a Virtue

Responsibility, when reconstructed in exemplary moral space, becomes a virtue, the pursuit of an excellence. This section pivots from the reactive model set forth by thinkers like Bradley and Strawson to a more prospective model. This positive model that portrays responsibility as a virtue targets

three skill sets: Role-taking, transperspectivity, and techno-social sensitivity.

- **Role-Taking**: Projecting into the standpoints of others to assess situations, formulate moral relevance, and outline actions. Requires the ability to explore multiple perspectives (multiple framings) and to move quickly from one to the other.
- **Transperspectivity**:"unravel or trace back the strands by which our constructions weave our world together." Also, the ability to "imagine how thwe world might be constructed differently." Johnson quotes Winter in Johnson 1993, 241. Steven Winter: "Bull Durham and the Uses of Theory" in Standford Law Journal, 42, 639-693.
- **Techno-social Sensitivity**: From Harris, SEE 2008: "Critical awareness of the way technology affects society and the way social forces, in turn, affect the evolution of technology."

Exercises

Identify the Relevance and Response components of the following cases:

- The disciplinary tribunal of the Puerto Rico State Society of Land Surveyors and Professional Engineers has a moral tribunal that investigates violations of the society's code of ethics. Individuals brought before the tribunal and found guilty of code violations are subject to temporary or permanent expulsion from membership of this professional society and from the privileges of attendant upon being a licensed professional engineer. Discuss rule compliance from the standpoint of "response to relevance." What is the relevance component? What is the response component?
- The Puerto Rican government held public hearings to review a private company's petition for permission to build a windmill farm on privately owned land located near a publicly owned nature preserve. (Bosque Seco de Guanica) The public hearings wer held in a distant place, at an expensive and exclusive facility, and at an inconvenient time for many of those opposed to the project. This activity was not well publicized. What aspects of this situation fall under the umbrella

- of moral salience or moral relevance? What would be morally appropriate responses available to those opposing the project?
- An engineer passes a laminating press room and notices that a fine white powder covers everything in the room, including the operator. The engineer talks with the operator and finds out that he has been working at this position for ten years. The operator says he is not aware of any evidence that this powder is dangerous or hazardous but has not really looked into the matter. He also appears not to be using any safety equipment to avoid exposure to the white powder. What is the moral salience of this situation? What would be some relevantly moral responses to this salience?
- A family is without electricity in the aftermath of a severe hurricane in a tropical country. Neighbors have generators which they run all day and night to keep their houses air conditioned and their appliances continually running. The family without a generator finds that the noise from their neighbors generators prevents them from sleeping at night. They finally give up starying in their house and stay in a hotel for the duration of the time it takes to restore their electricity. What is the moral salience of this situation and what are possible responsive actions that the neighbors with generators could take?
- Nathaniel Borenstein is a pacifist. He is also a computer programmer whose skills are in high demand for those developing military technology. But he has a strong commitment not to collaborate with the military or associated industries. So when NATO contacts him to assist them in building a training program for missile launchers, he politely but firmly refuses their overtures. But when he learns that the training program they have developed so far is embedded, he reconsiders his vow of non-participation. An embedded training program could mistakenly inform trainees that the system was in training mode when it was actually in operational mode. What is the moral salience of this situation and what is it about Borenstein that makes him uniquely qualified to attend to this moral salience? What kind of responsive actions are available to Borenstein? Would continuing his policy of non-participation be considered one of these options?

Bleak House is a novel written by Charles Dickens. In it, Dickens creates characters who embody different models of responsibility. Below are these characters and a brief sketch of their approach to responsibility. Read the sketches below. Then answer the following questions.

Character Sketches

- **Esther Summerson**: Esther believes in helping those around her. While she spends almost no time worrying about her own needs, she is entirely focused on those of her surrounding family, guardian, friends, and community. She finds an abstract conception of duty to be both difficult to comprehend and distracting since she is quite busy with helping those in her immediate surroundings.
- Mrs. Jellyby: Jellyby is entirely focused on the plight of the natives of the distant country, Borioboola Gha. She works tirelessly writing letters that inform others of their plight. She organizes activities to raise funds to help develop coffee plantations and to provide hungry children with food. While focused on the distant, she is completely unaware of what is going on around her. Her husband has lost his work and is depressed. Her children—we never know how many—run around unsupervised. There are several servants in the household but they drink, argue among one another, and generally do little to carry out their basic duties. When introduced to Jellyby, Esther notes jellyby's peculiar habit of looking through one as if she were focused on the distant plight of those in Borrioboola Gha. Dickens calls Jellyby a "telescopic philanthropist."
- **Harold Skimpole**: Harold Skimpole presents himself as a child. His lot in life is to give others pleasure by helping him. As for his own situation, he has a family that he neglect but somehow finds ways of attaching himself to those who supply him with the finer things in life: good food, drink, and fine clothes. He incurs debts which he foists off on other by pleading that he is incapable of understanding figures. He is but a child and all he asks for is to be able to live and to enjoy life.
- **Richard Carstone**: Richard Carstone is a handsome and talented young man. But he has trouble focusing on a career. He engages in studies in medicine and the law but is unable to focus on them and soon abandons them for a career in the military which he also abandons. He is a minor party to a long and complicated lawsuit. He

- devotes himself to its resolution placing all his hopes and efforts on coming into a substantial inheritance. His guardian, who was initially the source of his trust and love, is later seen by him as an opponent in the lawsuit. He interprets all his guardian's actions as motivated by the desire to win the lawsuit and to claim the money that properly belongs to him (Richard).
- **Mr. Tulkinghorn**: Tulkinghorn is a highly regarded lawyer, a keeper and discoverer of secrets. He has a very British view of society. A person's duty is to stay loyal to the duties of the station in which he or she was born. Those born aristocratic carry out their station of high fashion and the maintenance of large estates while those who are poor are relegated to working in the drastic employments available to their station. His job is to keep people in their stations and to prevent the rise of those who would usurp the stations of those born higher. In this way, he uses the law to maintain the natural order of society.

Questions:

- Which model of responsibility works best for you, Esther's "circle of duty" model where one starts with one's immediate surroundings or Jellyby's "telescopic" model where one focuses on the distant. Start by considering what would be the strength and weaknesses of each.
- Do you believe Skimpole is sincere in his project of avoiding responsibility. What kind of actions or thinking could Skimpole show that would give the lie to his claim that "I am only a child"?
- Richard places all of his hopes and dreams on the resolution of the lawsuit that encircles all the characters of Bleak House. Do you think this project sustainable? How could such a commitment render one less responsible, that is, less capable of response to relevance?
- Dickens seems to imply by his portrait of Jellyby and Esther that one can either attend to one's immediate surroundings or one can focus, telescopically, on what is distant. Is this "disjunction" necessarily the case? Can you think of anyone who has managed to combine both perspectives? Can you think of anyone else like either Esther or Jellyby? How are they able to balance these poles of responsibility?
- Dickens takes exception to two themes embodied in the lawyer Tulkinghorn. First, Tulkinghorn reduces moral responsibility to legal

responsibility? What do you think Dickens finds wrong with this. Second, for Tulkinghorn, the goal of legal responsibility is to maintain social order. Tulkinghorn's conception of social order is, in many respects, Medieval. He finds social order in every person's finding their station or social position, remaining loyal to that station, and performing its attendant duties. When someone rises above their station, Tulkinghorn feels it his duty to put them back in their place. What do you find wrong with this project? Do you think this problem endemic to responsibility or merely to Tulkinghorn's particular view of responsibility?

Teaching Responsibility: Pedagogical Strategies or Eliciting a Sense of Moral Responsibility--SEAC 2013

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Value Profile: Respect

This module profiles respect, one of the five values included on the Statement of Values prepared by the College of Business Administration at the Unviversity of Puerto Rico at Mayaguez

Respect: Recognizing and Honoring Rights

Respect is one of the five values included in the Statement of Values developed by the University of Puerto Rico's College of Business Administration. The following statement of respect was drafted by a committee of academic stakeholders in 2006:

Acknowledge the inherent dignity present in its diverse constituents by recognizing and respecting their fundamental rights. These include rights to property, privacy, free exchange of ideas, academic freedom, due process, and meaningful participation in decision making and policy formation.

The purpose of this module is to explore this value further by developing a conception of rights that are treated as modes of respect for human autonomy.

Along these lines, this module will present a framework for explaining and justifying rights and showing the correlativity between rights and duties. This framework is useful to explain and clarify widely accepted rights claims as well as to examine critically less widely accepted, more controversial rights claims. The content of the rights-based approach is summarized below in a table. Different sense of autonomy, loosely interpreted from Ética Para Ingenieros, help to provide a rough justification for the notions of rights. Finally, exercises help students progress from justifying and understanding non-controversial rights claims, to examining more questionable (and complex) rights claims, to examining rights in the context of community development and appropriate technology.

Six Statements on Rights

- 1. Definition: A right is an essential capacity of action that others are obliged to recognize and respect. (The key word is "essential." Essential here means essential to the development and maintenance of autonomy. For more on autonomy see below.)
- 2. Definition: A duty is a principle that obliges us to recognize and respect the autonomy of others (and of ourselves).
- 3. Correlativity of right and duty. Rights and duties are correlative; for every right there exists a series of duties that spell out how to recognize and respect the corresponding right, who should recognize and respect this right claim, and on what occasions.
 - Note that duty and right are defined, one in terms of the other. A right is a capacity of action that others are obliged (=have a duty) to recognize and respect. A duty obliges us to recognize and respect the autonomy (=rights) of others.
 - For every right, there is a correlativity duty to recognize and respect that right claim. (Actually a whole series or levels of correlative duties).
 - Rights (as modes of exercising autonomy) while essential to being human are also fragile, that is, vulnerable to certain kinds of threats. If the capacities or capabilities bundled under a right are not exercised or protected from these standard threats, then they disappear. (For example, humans are capable of speech but only if at certain key developmental times, they are exposed to and stimulated by speech.)

4. Rights claims have to be justified. A claim is a legitimate right if...

- It harbors a capability, the exercise of which is essential to autonomy. For example, without general and specific information, one cannot exercise one's agency in an autonomous fashion. Thus informed consent is essential to autonomy.
- It remains vulnerable to a "standard threat." For example, one cannot exercise autonomous agency if one is deceived or if information crucial to responsible, autonomous action is covered over or withheld. Hence, a standard threat to informed consent is presenting false information or covering up true and vital information.

- That the correlative duties it requires to recognize and respect autonomy do not deprive the duty-holders of anything essential. For example, I may have a right to life but that right cannot be extended to the point where I can oblige another to sacrifice her life so that I might live. To assert my right to life at the expense of others is to deprive them of something essential to their autonomy, namely, their life.
- 5. For every right there are correlative duties to (a) not violate or deprive another of that right, (b) prevent others from depriving individuals of their rights, and (c) aid those who have been deprived of their rights and thus restoring their dignity and autonomous agency. These duties can rest on duty-holders who are individuals or on collectives such as organizations or institutions. For example, individuals have the duty not to deprive others of their privacy by hacking into their email accounts and reading their messages. On the other hand, the institution of civil law provides a means of aiding those who have been deprived of rights like privacy and property. This represents a collective rather than an individual duty-holder.

Table on Rights and Duties

Concept	Definition	Elaborations	Examples
Right	An essential capacity of action that others are obliged to recognize and respect.	Framework to justify right claims: (a) Essential to autonomy; (b) Vulnerable to a standard threat; (c)	Some Key Rights in Business: Free and Informed Consent, Due Process, Privacy, Free Speech, Property, and

		Feasible in that recognizing and respecting right claims does not deprive the duty-holder of something essential.	Freedom of Conscience
Duty	A principle that obliges us to recognize and respect the autonomy of others (and of ourselves).	Duty Levels: (a) Not to deprive; (b) Prevent deprivation; (c) Aid the deprived	These two Kantian Principles encapsulate respect for Autonomy: (1) Categorical Imperative: Act only on that maxim that can be made into a universal law; (2) Formula of the End: Treat others always as ends and never merely as means.
Correlativity of rights and duties	The definition of right	Because rights and duties are	This is a controversial thesis.

includes defined in Nevertheless, terms of one the concept the of another they correlativity obilgation thesis harbors are or duty. the truth that correlative; for every rights neither The definition right there is exist nor of duty is function in a a series of built correlative vacuum. To duties. characterize around recognizing rights as and claims is to respecting imply that rights. they are claims over someone to do something. Especially important is the notion that rights identify capacities of action that are vulnerable to standard threats. **Rights** (1) Essential In relating the To **Justification** establish a to autonomy; right claim to Framework rights claim **(2)** autonomy, **Vulnerable** remember to as legitimate, to a "standard connect it to threat"; (3) one of the one must **Feasible** in four senses of prove that the claim that it autonomy is... discussed imposes on the dutybelow: (1)

		holders an obligation whose execution does not deprive them of something essential.	Self-Choice; (2) Self- Legislation; (3) Authenticity; (4) Self- Decision.
Identifying Correlative Duties	Correlative duties form levels and often proceed from basic individual duties to social or collective duties	(a) Duty not to deprive an individual of a right; (b) Duty to protect others from being deprived of their rights; (c) Duty to aid those who have been deprived of their rights.	The first two correlative duties are generally carried out by individuals: (a) For example, one cannot deprive others of their rights to informed consent by withholding information; (b) If someone else is withholding information and one can prevent deprivation by revealing this information, then one has a duty to do so; (c) But often

	societies collectively aid those who have been deprived of their rights by creating legal procedures that those suffering rights deprivations can appeal to.
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Rights as modes for recognizing and respecting autonomy

Four Senses of Autonomy: Self-Choice, Self-Legislation, Authenticity, and Self-Decision

In this module, rights have been explained as capacities of action that are necessary to the exercise of human autonomy. In this section, autonomy will be characterized as self-choice, self-legislation, authenticity, and self-decision following **Ética Para Ingenieros**, 2a Edición, by Galo Bilbao, Javier Fuertes, and José Ma Guilbert, Universidad Jesuistas, 160-164. Bilbao, Fuertes, and Guilbert draw from the writings of Diego Gracia, in **Fundamentos de Bioética**, Eudema, Madrid. What follows draws upon but also takes some liberties with the accounts by Diego Gracia as well as Bilbao, Fuertes, and Guilbert.

1. The literal meaning of autonomy comes from the Greek words, auto (=self) and nomos (=law).

Thus, autonomy is literally the ability to give the law to oneself, to legislate for oneself. This presupposes that one can adopt a rational and universal standpoint and design rules or maxims that apply equally to oneself and to all others. I develop rules and guidelines for myself that, at the same time, I can consistently will for all others.

2. Autonomy as self-legislation ties in closely with Kant's Categorical Imperative and Formula of the End.

The Categorical Imperative holds that **I** can act only on that maxim (=personal or subjective rule) that can be converted into a universal law (=rule that applies to all). Cheating for example, fails the CI because its maxim (I can copy from another when I need to) is self-defeating when universalized. (Why?) The Formula of the End states that **I** must treat humanity (myself included) always as an end and never merely as a means. Whenever I lie, deceive, force, manipulate or impose fraud on another to achieve my ends, I seek to circumvent that person's autonomy; I bring her into the scope of certain projects without getting her explicit and full rational consent. (I ask an acquaintance out for a date, not because I value her as a person, but because I want to make my ex-girlfriend jealous.)

3. Many say that the ability to exercise autonomy as self-legislation rests upon the ability to take the moral point of view.

Here one takes up the position of the other through a skill moral psychologists call "role-taking." I project into the standpoint of another and view the action I am considering from her perspective. If this action is as acceptable from her perspective as it is from mine, then it is reversible, and thereby recommended.

4. Autonomy can also be characterized as the synthesis of freedom from and freedom to.

- **Freedom from** is liberty, the absence of obstacles that stand in the way of what an agent wants to do. Because of this, freedom from is the negative sense of autonomy; it clarifies what opposes autonomy and must be removed to facilitate it. But freedom from does not provide a positive account of what one does after all obstacles to action have been removed.
- **Freedom to** is the positive characterization of autonomy. It spells out what I do when I have achieved freedom from. It requires a conception of the good as well as identity-conferring projects that I work to bring about. It also sets forth side constraints such as Kant's Categorical Imperative and Formula of the End. Thus, I develop life plans whose realization requires access to the means to carry them out. But these plans are pursued within the constraints that Kant sets forth in the

- Categorical Imperative and Formula of the end; I can solicit the help of others in pursuit of my projects but only if I do so without circumventing their autonomy through deception, force, manipulation, or fraud.
- Isaiah Berlin provides an especially clear and persuasive account of freedom to and freedom from in his article "Two Concepts of Liberty."

5. Bilbao, Fuertes, and Guilbert distinguish four senses of autonomy

- 1. Autonomy as **self-choice** (**autoelección**). This sense covers the negative sense of freedom, freedom from obstacles to pursue my preferences and wishes. Mill gives voice to this conception of autonomy in his book, On Liberty. (See his classical defense of freedom of speech.) Autonomy in this sense is based on the removal of obstacles that impede my exercise of freedom. Thus, the right to an education is characterized as removing obstacles to my becoming educated; it also gives me access to means of becoming educated. What I learn, the content of my education, is left open to determination by the individual; Mill sets forth an indefinite and wide range of options for exercising "freedom to."
- 2. **Autonomy as self-legislation (autolegislación)**. As described above this is the Kantian sense in which individuals exercise the capability of giving the law to themselves. This includes a moral aspect or dimension: we discipline our individual lives by developing rules to guide our own lives that can also be extended to all others. We conceive of ourselves and others as living within what Kant terms a "kingdom of ends" where all, because they possess certain human capacities, are entitled to being treated always as ends and never merely as means. This sense of autonomy is the one most explicitly tied to respect.
- 3. **Autonomy as authenticity (autenticidad)**. This sense of autonomy recognizes the extent to which the individual is influenced by his or her social and natural environment. For example, the philosopher F.H. Bradley carries out a thought experiment based on removing everything English from the English person and asking what is left over after this abstraction. Removing language, cultural norms, experiences generated interacting with others and rendering the

individual an isolated social atom deprives the individual of all determining content. Thus, Bradley terms the remainder an "I know not what" residuum; emptied of all social content, the individual becomes merely an indeterminate placeholder. This sense of autonomy starts from the fact that we are social beings who are shaped (enabled and constrained) by our social and natural context. It then shows how we find ourselves as individuals in this social experience and then act responsively: (a) I can criticize my social being and reject the social forces that work to constrain and channel my actions; or I can accept or acquiesce to these forces and choose to define myself by loyalty to my social context. Either way, I recognize myself in this social space and take responsibility for it by choosing my response. Much of this approach is captured by Existentialism; (b) This can also be understood in terms of moral development. For Kohlberg, the conventional levels of moral development are characterized by individuals making decisions based on what others think or advocate. For example, one conforms to others and bases one's choices on what is recommended by "authorities"; (c) One reaches post-conventional levels of moral development by questioning authority and other external sources of moral conduct. This is purchased through the achieving of critical distance by exercising the skills of moral imagination like multiple framing of one's situation or by role-taking to gain insight into the perspective of others.

4. Autonomy as self-decision (autodecisión). This sense is closely related to the previous sense of authenticity in that it involves recognizing oneself as embedded in a natural and social context, and then taking responsibility for one's subsequent choices, habits, and character as made within this context. In a manner different from Bilbao, Fuentes, and Guilbert, I will characterize self-decision along the lines of self-realization following Taylor, Aristotle, and Bradley:

(a) According to Taylor, one finds oneself in a social and natural situation through "strong evaluation." Here one questions one's fundamental commitments (those that constitute one's identity) in a radical and fundamental way. Taylor characterizes strong evaluation as a hermeneutical act where one uses one part of one's self to attend to and question the other parts. (b) Aristotle also sets forth a self-realization ethics. Virtue (=arête) exercises and realizes those

capabilities which are most fully human. By exercising virtue, we realize our natures (and our selves) and become fully happy (=eudaimonia). (I have inserted the Greek words, arête and eudaimonia to show that Aristotle's concepts are only partially translatable.) (c) Bradley puts this differently. I realize myself by taking up a social station within society and performing its attached duties. Bradley makes use of an organic metaphor to characterize his version of self-realization. By taking up a social station and performing its duties, the individual becomes a functioning organism within society which is now viewed as a social or moral organism. The heart pumps blood throughout the body; by performing its function it also helps the body as organim to stay alive. Individuals by performing the duties of the moral organism help keep this moral order alive and properly functioning. (How do engineers and business persons contribute to the social good?)

Two thought experiments on autonomy

Mountain Terrorist

- 1. The Mountain Terrorist. One is visiting a remote village when, suddenly, it is overrun by terrorists. They line all the inhabitants in the village against a wall with the intention of killing them. When you remonstrate with the terrorists not to do this, they give you a choice: you can, yourself, select a villager and kill him or her with a gun they provide; or you can choose to do nothing in which case they revert to their original plan to kill everybody. Bernard Williams uses this thought experiment to point out the limits of utilitarianism which would dictate that one should kill a villager in order to save the rest. Perhaps this course of action would maximize utility. But how does it stand with one's sense of self and autonomy? For example, killing an innocent villager might be so disruptive of one's autonomy that it undermines future agency. It might go against one's identity-forming commitments or projects. If so, then guilt from killing an innocent person would undermine one's core beliefs, disrupt self and identity, and render future authentic action difficult if not impossible.
- 2. George the Chemist must choose between carrying out his responsibilities to his family and remaining true to his pacifism by

refusing to work with a company that would use his knowledge of chemistry to build war weapons.

- Are those who insist that George set aside his pacifist beliefs interfering with his autonomy? If so, to which sense of autonomy are you referring? Self-choice, self-legislation, authenticity, or self-decision?
- Many students have characterized George's reluctance to pursue work with the company that manufactures weapons as self-indulgence. They would say that while George's pacifism is important to George's sense of identity, he should be willing to sacrifice this in order to carry out his responsibilities to his wife and children. But if George sets aside fundamental commitments (like his pacifism) can he still remain integral and authentic?

What you are going to do

Exercise One: Use the frameworks presented in the table above to justify the following rights: informed consent, due process, privacy, property (physical and intellectual), free speech, freedom of conscience. Answer the following questions about each right.

- 1. Define or describe the right. Include an example.
- 2. Provide an argument that the right claim in question is essential to autonomy. That is, what capacity of action is protected by the right claim? How does the exercise of this capacity help an individual formulate and execute life plans that fulfill basic (rational?) desires? Why is the capacity of action essential and not merely trivial? (e.g., I have a right to scratch my nose in public when it itches.)
- 3. How is the capacity of action that the right protects vulnerable? (Why does it need protecting?) In other words, identify a standard or common threat that undermines an individual's ability to exercise this capacity of action.
- 4. What are the duties that are correlative to your right? Who are the duty-holders? What must others do to keep from violating your right claim? What kinds of agents are in a position to prevent others from

- depriving you of your right? What kind of social mechanisms should be created to aid those who have been deprived of their rights?
- 5. Is the right claim feasible? For example, you may have a right to life. A standard threat to this capacity of action (and being) may be failure in both kidneys. But does your right to life compel another, say a stranger, to donate a kidney to save your life? Does this mode of exercising your right deprive another of something essential?

Exercise Two: Use the frameworks to examine the following rights claims. Use the steps spelled out in Exercise One. Does the rights claim you are examining satisfy the steps in exercise one?

- right to a livable environment
- right to have adequate food, clothing, and shelter
- right to an abortion
- right to form unions and the right to strike
- right to have gainful employment (right to a job)
- right to an education
- right to full medical care

Exercise Three: Martha Nussbaum in Women and Human Development portrays "two women trying to flourish."

- 1. Vasanti was compelled to marry at a young age. In her caste, women are generally treated as property; she went from the family in which she was raised to the family of her husband. Like property, her husband was free to dispose of her as he saw fit. He beat her, forced her to work, and took the wages she earned through work and spent them on his leisure and on alcohol. In order to fund his alcohol habit, he had a vasectomy for which he received payment from the government. This ensured that he and Vasanti would not have children, something Vasanti wanted for her emotional fulfillment and economic security.
 - Does Vasanti have the right not to be treated as property?
 - How would this right be formulated?
 - What does it include? (For example, does it include the right not to be beaten or the right to be protected from forced, conjugal sex?)
 - What essential capacities of action would this right protect?

- Do women like Vasanti have this right even though they may not be aware of it due to what is termed "preference deformation?"
- 2. Jayamma carried bricks for a living in order to support her family. Although her work was harder than that performed by men she was paid less than them. When she became too old to continue with this arduous labor, she applied for relief. The Indian government denied her relief because she had sons who were able to support her. Yet her sons, for various reasons, were not willing to support her. Her daughter, who was willing to support her, was a registered nurse. Yet she was not able to practice because she could not pay the money necessary to bribe hospital officials to give her a job.
 - Does Jayamma have a right to equal pay (and equal treatment) in her employment? Does this right exist in itself or must it be derived from another, more fundamental right?
 - If Jayamma has such a right, how can her society aid her as one who has been deprived of this right?
 - Do Jayamma's sons have a duty to support her now that she is too old to work? If so, to what right is this duty correlative?
 - Does Jayamma's daughter have a right to work in the profession (nursing) for which she is qualified? If so, what is the standard threat present in this situation that must be addressed to protect her right to work? How are the duties correlative to this right to work to be spelled out and distributed? (What individuals have which level of correlative duty? What organizations exist or could be devised to carry out some or all of the correlative duties?)

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Value Profile: Trust

This module is one of several that provides an in-depth examination of the values included in College of Business Administration's (from the University of Puerto Rico at Mayaguez) Statement of Values. It highlights the features of this value, provides a summary table, and uses the Prisoner's Dilemma to help students visualize the importance and fragility of trust. This module is part of a collection of modules that explores all five values included in the Statement of Values: justice, responsibility, respect, trust, and integrity. It is also developed as part of an NSF-funded project, the EAC Toolkit--NSF SES 0551779 and relates to the ongoing NSF project, GREAT IDEA.

Introduction

Trust is one of five values identified by the College of Business Administration at the University of Puerto Rico at Mayagüez for inclusion in its Statement of Values. These values were identified in a workshop held in 2005. There participants explored values in different codes of ethics, identified the values embodied in the rules they drafted to guide daily conduct, and carried out selection and prioritization activities to refine and reduce a large list of candidate values to five. A committee of stakeholders (administration, faculty, staff, and students) studied the values and wrote out short descriptions of each. Finally, the Statement of Values and its value profiles have been subjected to different challenges. Stakeholders have translated the SOV into Spanish, tested it for comprehensiveness using case studies, and used test results in classes to hone in on conceptual ambiguities. The SOV provides the following formulation of trust:

Recognize that trust solidifies communities by creating an environment where each can expect ethically justifiable behavior from all others. While trust is tolerant of and even thrives in an environment of diversity, it also must operate within the parameters set by established personal and community standards.

This conception of trust as the expectation of moral behavior from others comes largely from Robert Solomon. This module will build on Solomon's treatment by integrating it with that of Margaret Urban-Walker in her book, **Moral Repair: Reconstructing Moral Relations after Wrongdoing**. Trust is absolutely essential in constructing moral transactions and building a civilized life. But wrongdoing can disrupt--even destroy--social transactions, leaving civil ruin in its wake. As Urban-Walker explores the different ways to carry out moral repair, the restoration of trust emerges as an essential component. For example, she lists six tasks as constitutive of moral repair. Trust plays an essential role in the following two (MR 28):

- "Moral repair is served by replenishing or creating trust among individuals in recognition of shared moral standards and in their responsiveness to those standards and support of the practices that express and support them."
- "Moral repair is served by igniting or nourishing hope that moral understandings and those who are responsible for supporting them are worthy of trust."

Trust as a Concept

Below are five statements about trust that bring out important components about this concept. Moral concepts are not as easily defined or applied as mathematical or even scientific concepts. They are best approached by examples and by moving from clear and indisputable examples to more complex, grey-shaded ones. They are also approached by what Gilbert Ryle used to term conceptual cartography; one understands one concept by drawing out a map that conveys its relations to other, similar concepts. Understanding trust requires exploring its relations to concepts like responsibility and hope. Trust is a kind of sensitivity or responsiveness that arises in social relations; thus, it is a mode of responsibility. And trust is ignited, sustained, and restored through hope; when disrupted by wrongdoing and betrayal it can be restored by forgiveness. So our accounting of trust will touch on its relations to these related moral concepts.

1. Trust is reliance on responsibility

Trust has a central or core meaning that Urban-Walker characterizes as "reliance on responsibility." I rely on others to behave responsibly in everyday social interactions; I also understand that they rely on me to behave responsibly. This is close to Solomon's formulation of trust as the expectation of ethically justifiable conduct from others. But Urban-Walker inserts trust into the everyday moral relations and interconnections created by responsibility. As we will see below, trust is best understood by spelling out the context in which it functions where individuals interacting with one another, stand vulnerable to each other, and rely on one another to carry out the duties and projects of their lives.

2. Trust makes us vulnerable and dependent on the good will of others

Trudy Grover (as summarized by Urban-Walker) identifies several characteristics of operative trust (MR 79): (a) "expectation of benign behavior based on beliefs about a person's motivation and competence;" (b) "an attribution of general integrity;" (c) "an acceptance of risk and vulnerability;" (d) a "disposition to interpret the trusted person's actions favorably." This list conveys the idea that trust makes us vulnerable to the actions of others while it makes them vulnerable to our actions. Trust, others words, arises only when we risk betrayal.

3. Trust requires taking up the "participant attitude."

Trust takes place within what the philosopher Strawson terms the "participant attitude" or participant standpoint. This standpoint is accompanied by reactive attitudes; should others fail to do what is expected of them or fall short of commonly accepted moral standards, then we respond with "reactive attitudes" like resentment and indignation. In fact, trust functions through a whole series of responsive emotions such as pride, shame, resentment, indignation, and hope. (MR 79) When we take up the participant standpoint, we become involved in the world and its interrelations and transactions. Opposed to this is what Strawson terms the **objective attitude** where these intentional and self-directed emotions do not apply because the agent, for some reason, fails to become involved in social and moral relations. Part of what it means to be moral is to be subject to these reactive attitudes as well as being able to direct them responsively toward others. Psychosis is defined as being unable to exercise reactive attitudes; one doesn't feel resentment or indignation or feels them inappropriately. Thus, trust must be understood as functioning within the participatory standpoint, that is, within a network of social and moral interdependencies and transactions.

4. There are several factors that motivate or encourage the development of trust.

- Urban-Walker presents motives that foster and maintain trust. She takes these from Pettit (MR 76-77). Thus, trust is motivated by...
- working to "keep the good opinion that my trust already displays"
- a "concern for reputation"
- "in pursuit of reciprocity"
- "out of fear of penalties for poor performance"
- "out of an impersonal sense of obligation" (76-77)

5. Trust, hope, and forgiveness.

Trust (and restoration of trust) is closely related to other attitudes such as hope and forgiveness. Hope (its futurity, desirability, possibility, and dynamic tendencies) opens one to responsive action in the future. Hope maintains trust and can even restore it when wrongdoing has undermined its proper functioning.

6. Ways of bulding trust.

The chart below also presents different strategies for creating and preserving trust as presented by psychologist, Steven Pinker. In his book, **The Better Angels of Our Nature**, Pinker provides a sustained argument that evil and violence have gradually diminished throughout the history of human kind. This decline is caused by an increase in trust in much the same way that cooperation places Prisoner Dilemma iterations on target toward the common good. Think about how the Pacifist's Dilemma, Leviathan, Commerce, Femiknization, and Cosmopolitianism and Reason can be modelled in the context of the Prisoner's Dilemma. (See below)

Core Meaning or Root Metaphor(1,1)	Description(1,2)	Features(1,3)	Exercises in Trust (Steven Pinker: The Better Angels of our Nature(1,4)	Cases and Examples(1,5)
The expectation of moral conduct on the part of others (Solomon)(2,1)	Urban-Walker: "Trust, in several varieties, is an attitude of reliance on others that holds those others responsible for the performance on which we rely" 27(2,2)	Attributes from Trudy Grovier summarized by Urban-Walker: (a) "expectation of benign behavior based on beliefs about a person's motivation and competence;" (b) "an attribution of general integrity;" (c) "an acceptance of risk and vulnerability;" (d) "disposition to interpret the trusted person's actions favorably;" 79(2,3)	Pacifist's Dilemma: "Common good dictates a strategy of peace. But individually, aggression is the best choice to protect against being the victim of aggression oneself."(2,4)	Death and the Maiden (Dorfman): a woman victimized under a South American dictatorship, has a chance to confront the man she believes raped her during the dictatorship. (2,5)
Urban-Walker: "I propose, then, that we think of interpersonal trust generically as a kind of reliance on others whom we expect (perhaps only implicitly or unreflectively) to behave as	"expectation of others for recognition of shared moral standards" and their "responsiveness to those standards and support of the practices that express and enforce them" 28(3,2)	(3,3)	Leviathan: "The Leviathan (power, state, authority) is charged with maintaining peace by being endowed with the authority and power to punish the aggressor. by overawing potential aggressors and self-serving human nature, the	House of Games: A confidence man, Mike, explains how he gains the trust of the mark by seeming first to give his own trust.(3,5)

relied uponand to behave that way in the awarenessthat they are liable to be held responsible." 78(3,1)			Leviathan creates an additional external incentive that pushes potentially warring parties toward peace." (3,4)	
Expectation of others to perform as relied upon(4,1)	Karen Jones: "trust is an affective attitude of optimism about the good will and competence of another in the domain of our interaction that creates an expectation that the other will be moved 'directly and favorably the thought that we are counting on her" 75(4,2)	Motives engendering trust from Pettit as summarized by Urban- Walker: "(a) "keep the good opinion that my trust already displays" (b) "one may also be responsive to trust out of concern for reputation" (c) "in pursuit of reciprocity" (d) "out of fear of penalties for poor performance" (e) "out of an impersonal sense of obligation"(4,3)	Commerce: "Commerce, working through markets of exchange of goods, makes collaboration and peace mutually advantageous. The invisible hand of the market place steers our aggressions toward the common good." The market properly aligns incentives.(4,4)	Classroom Behavior: (a) The classroom consists of relations of trust where we rely on one another to live up to standards of academic honesty. (b) Failure triggers participant reactive attitudes like resentment and indignation. (4,5)
The participant attitude toward reliance in which I am prepared to hold you responsible for doing what I assume you should do 80(5,1)	Anette Baier: "Trust is accepted vulnerability in relying on the good will and competence of others to 'take care' of something the truster cares about." 76(5,2)	(5,3)	Feminization: "Replacing masculine virtues of honor and audacity with feminine ones of care and stewardship, we remove incentives to war."(5,4)	Financial Crises: Former Goldman Sach executive claims that GS called clients "Muppets" and would think nothing about unloading bad investments on those with less experience and financial savvy. (5,5)

Root Meaning: "reliance on responsibility" (from Urban- Walker) with a close connection to Strawson's participatory reactive attitudes such as resentment and indignation. (6,1)	(6,2)	"Focus of trust" (closely paraphrased from Urban- Walker): (a) description within trust relation of distinct actions (b) designation of a task (c) reference to roles characterized by "standard assumptions" (d) mutually understood expectations developed in an ongoing relation (e) reference to general or specific norms 80-1(6,3)	Cosmopolitanism and Reason: "Cosmopolitanism expands the circle of sympathy to a global reach while replacing warrior emotions and passions with reason. (See Kant's recommendations for a Perpetual Peace.)(6,4)	Given regulatory gaps (and costs) and the need for a broad participation of individuals in financial markets, can finance perform its function (moving money throughout an economy) without trust? (6,5)
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Table Summarizing Features of Trust

Prisoner's Dilemma

Imagine that two patriotic spies, A and B, have just been captured by the enemy. Both are placed in separate interrogation cells and are being pressured to confess and provide details about their spying activities. A and B would like to coordinate their actions but the enemy has kept them apart to prevent this. In their malevolence they wish to pit A against B in order to get the desired information. To do this, they have set forth the following systems of motivations, i.e., punishments and rewards.

Options

- 1. If both A and B confess then A and B are put in jail for five years each. The net loss in this scenario is 10. This is the least desirable alternative from the collective standpoint.
- 2. If one (A or B) confesses while the other does not, the confessor is released immediately while the non-confessor gets seven years in prison. This is the self-interest maximizing option for the confessor and the worst possible option for the non-confessing prisoner. Loss for confessor: 0. Loss for non-confessor: 7. Net loss: 7
- 3. If both do not confess then after six months of half-hearted interrogation (most of this time is for processing the prisoners' release), both are set free for lack of evidence. While not maximizing self-interest (this lies in one confessing while the other remains silent) this does maximize overall welfare by producing a net loss of only 1.

Prisoner A / Prisoner B	Confess	Not-Confess
Confess	Both A and B confess. This is the worst option collectively considered. Net loss: 10	B confesses while A does not confess. B maximizes self-interest while A suffers maximum individual loss. Net loss: 7
Not- Confess	A confesses while B does not confess. A maximizes self-interest and B suffers maximum individual loss. Net loss: 7	Both A and B do not confess. 0.5 loss to each (second best individually) while collectively considered this is the best outcome. Net loss: 1

Summary Table

The Prisoner's Dilemma is designed to model the reality of corporate governance where the directors/owners of a corporation delegate responsibility for the corporation's operations to managers who are charged with pursuing, not their own interests, but those of their directors. The problem of corporate governance is how to institutionalize this cooperative arrangement. Can managers be left alone and trusted to pursue the best interests of the corporation? This is the position of stewardship theory. Or is it necessary to design a system of external controls and incentives (mostly punishments but some financial rewards) to keep the managers from diverting the operations of the corporation toward their exclusive, self-interests?

The latter approach is taken by agency theory. Here human nature precludes that managers will carry out the interests of directors unless externally motivated to do so. Naturally inclined to maximize self-interest, managers must be forced in the direction of director and owner interest through external incentives such as punishments and rewards (formulated in terms of incentives for producing results of value to the corporation as a whole).

The repeated iteration version of the Prisoner's Dilemma attempts to model this debate between agency theory and stewardship theory. If one holds that cooperation only arise through "tit for tat" strategies, then one advocates agency theory. If, on the other hand, one holds that repeated iterations build trust and give rise to altruistic activity, then one is more sympathetic to stewardship theory which holds that managers can set aside rational self-interest and act as stewards who represent or embody the interests of the owners.

The Prisoner's dilemma is discussed throughout the literature in business ethics. For a novel and insightful discussion in the context of corporate responsibility see Peter A. French, 1995 **Corporate Ethics** from Harcourt Brace College Publishers

What you are going to do

Exercise One

- Play the Prisoner's Dilemma game with one of your group members.
- Make sure you understand the options and the rewards and punishments associated with each. If you confess while your teammate does not confess, you get 0 points while your teammate loses 7. If you both confess, you each lose 5 points for a net loss of 10. If you both decide to not confess, then you each lose 0.5 points with a net loss of 1.
- Play only one round.
- Do not discuss what you are thinking with your teammate. Remember the enemy is keeping you separate to prevent collaboration.

Exercise Two

- This is the same as exercise one except you will play multiple rounds. Your teacher will not tell you how many rounds you are playing until you reach the last round.
- What is the difference between playing only one round and playing n rounds?
- Where are you more likely to compete or anticipate competing? When you are playing only one round, when you play several rounds and know in advance how many, or when you are playing an indefinite number of rounds and now find yourself on the last round?
- What can you do as a player to motivate your teammate to cooperate rather than compete? How should you respond when your teammate decides to cooperate and not confess? How should you respond in future rounds after your teammate confesses?

Exercise Three

- a. The following are claims as to the assumptions made by the prisoner's dilemma. Evaluate each.
- Cooperation produces the best collective option and the second best individual option. This, in turn, assumes that cooperation produces more social welfare than competition.
- Free riding (competing) on the cooperation of others produces the most individual gain (for the free rider) but the second worst collective results. Society suffers loses from the harm done to the trusting, non-confessor and from the overall loss of trust caused by unpunished free-riding.
- Unlimited, pure competition (both prisoners confess) produces the worst collective results and the second worst individual results.
- Multiple iterations of the prisoner's dilemma eventually lead to cooperative behavior. But what causes this? (1) The trust that emerges as the prisoners, through repeated iterations, come to rely on one another? Or (2) the fear of "tit-for-tat" responses, i.e., punishing free riding by responding in kind on future iterations?
- b. Is the Prisoner's Dilemma neutral regarding human nature or does it assume Homo Economicus, namely, that each player is a socially atomistic, rational, self-interest maximizer?

Exercise Four

- Agency theory assumes that cooperation is the best collective strategy but cannot be achieved by relying
 solely on human nature. This is because agency theory is based on Homo Economicus which holds that
 each human individual is a self-interest maximizer and is ontologically separate from other individuals
 and society. In other words, human individuals will seek to maximize self interest unless there are
 external constraints and incentives that force them toward what is best collectively. The best strategy for
 corporate governance under this approach is compliance. One identifies rules, monitors conduct, and
 punishes non-compliance.
- Opposed to agency theory is stewardship theory. While acknowledging that humans are strongly motivated by self interest, they are also equally capable of altruistic, other-oriented behavior. Hence what is required is an integrity approach to corporate governance that works to strengthen altruistic impulses through the development and fostering of trust.
- Write a short essay (or hold a discussion within your group) as to which approach is best. What is the underlying approach to human nature that each assumes. What are the strengths and drawbacks to each approach? Which approach is best supported by what you have learned from playing the Prisoner's Dilemma?

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Value Profile: Integrity

This module is one of several that provides an in-depth examination of the values included in College of Business Administration's (from the University of Puerto Rico at Mayaguez) Statement of Values. It highlights the features of this value, provides a summary table, and uses exercises to reflect on the importance and on the different dimensions of integrity. This module is part of a collection of modules that explores all five values included in the Statement of Values: justice, responsibility, respect, trust, and integrity. It is also developed as part of an NSF-funded project, the EAC Toolkit--NSF SES 0551779 and relates to the ongoing NSF project, GREAT IDEA.

Introduction

(The Standford Encyclopedia has an excellent article on integrity by Damian Cox, Marguerite La Caze, and Michael Levine. Visit http://plato.stanford.edu/)

Integrity has been identified as a core commitment of the University of Puerto Rico's College of Business Administration. Robert Solomon, a virtue business ethicist, has characterized integrity as a meta-virtue whose function is to unify and integrate all the other virtues. Of course, while it is controversial whether integrity is a virtue, it is clearly a value and of great importance in the College of Business Administration's moral perspective.

The Statement of Values, approved in May 2006 by College of Business Administration stakeholders is described there in the following way:

Promote integrity as characterized by sincerity, honesty, authenticity, and the pursuit of excellence. Integrity shall permeate and color all its decisions, actions and expressions. It is most clearly exhibited in intellectual and personal honesty in learning, teaching, mentoring and research.

This characterization has been a source of difficulty for students in Business Administration who frequently confuse it with trust and responsibility. It is also a point of controversy within the College of Business Administration as to whether integrity is a meta or unifying value or whether it is a separate value that stands by itself.

This module will cover integrity by setting forth its different senses or aspects, providing a table that summarizes these different senses, and by offering students a series of exercises that give them an opportunity to reflect on some of the difficulties raised in the literature that discusses this important concept.

What you need to know

1. Integrity has five different senses

- 1. **Integrity involves integration that brings about unity or wholeness.** A person of integrity over the long haul works to unify and integrate the constituents of character (its different traits) into a single, coherent identity. Among those constituents are emotion, thought, value, commitments, projects, beliefs, and attitudes
- 2. **Integrity involves consistency** of action across situations and over long periods of time. (For example, this time span could encompass a entire career or even a lifetime). The Milgram experiments pose a special challenge to this sense of integrity; normally decent individuals act immorally in specially constrained situations under direct pressure. These results are cited to undermine the claim that character traits are robustly trans-situational and that integrity as consistency of action across situations is unfeasible as a moral ideal. But a weaker, more likely conclusion is that consistency of action is possible although difficult; it requires rigorous moral training where students practice and come to dominate strategies for resisting the forces that undermine character expression. The Hitachi Report (ref) provides grounds for developing strategies for designing and maintaining a moral career by setting forth the

different organizational environments in which professionals work, how they challenge and constrain moral choice and action, and the different ways in which professionals participate in decision-making. Organizations can be built around different goals depending on whether they are driven by financial, customer, or quality based objectives. Each organizational environment presents different challenges to the professional who would maintain a moral career. Moral education becomes more individualized by helping students to identify the environment in which they will work and then offering strategies and skills particular to each for forging a moral career. Alongside this emphasis on organizational context is a new literature from business ethics devoted to values-based decision-making. For example, Mary Gentile's "Giving Voice to Values: How to Speak Your Mind When You Know What's Right" empowers students to stand up for and advocate moral values; it helps them by presenting procedures for resisting pressures toward wrongdoing. Another factor that promotes consistency is moral courage; this virtue empowers one to act consistently across situations even in the face of daunting challenges and formidable pressures to the contrary.

- 3. **Commitment**: A person of integrity has a self-system built around moral beliefs and values. This moral content represents identity-forming commitments that express themselves through the choices, actions and projects carried out by an individual. Moral psychologist, Augusto Blasi, shows how integrity results from an educative process where an individual successfully integrates moral values and beliefs into the core of his or her "self-system." Emotions, beliefs, attitudes, etc., provide vehicles for integrating value into the self-system. This process underlies the socialization of students into the non-moral values of a profession through formal and informal education. But Blasi focuses on the integration of moral content into the self-system and how this integration makes moral value a primary motive for action. Having successfully integrated moral value into the central self system, a person of integrity expresses moral value and moral character through his or her choice of action and conduct over a career. In this way, moral action expresses moral character. Conversely, should a moral agent do something wrong, this action goes against character and creates an identity crisis; how does the agent become responsible or own up to action that, because it is immoral, is clearly "out of character?"
- 4. A person of integrity is a person of strong and focused conviction. He or she takes a stand—often a courageous stand—on the side of moral value. This sense of integrity applies especially where moral value is at risk; the person of integrity will stand up to this threat motivated by strong moral commitments, beliefs, and attitudes. This sense is closely related to the commitment sense; a person of integrity has something for which he or she takes a stand and in which he or she strongly believes. The opposite here would be what Martin Benjamin terms the moral chameleon; like a chameleon, this person lacks conviction and changes moral convictions and beliefs to match what dominates the immediate environment. Thus moral chameleon lacks any convictions strong enough to serve as the basis for "taking a stand."
- 5. **Incorruptible**: This sense is especially important in Latin American countries like Puerto Rico. Corruption has come to represent the unethical and the anti-ethical taken in the broadest sense. Thus, a person of integrity is the opposite of one who is corrupt; integrity points to the manifestly uncorrupt and incorruptible. Moral integrity here implies that the agent's self system is solidly integrated around moral value. She is able to resist forces that threaten the unity of the self from both internal and external sources. Internally, one becomes corrupt by abandoning integration around moral value to impulse, desire, inclination, passion, and appetite. External corruption is generated by strong pressures toward wrongdoing that are generated by the organizations within which we work and live. A supervisor orders one to do something illegal or immoral; a peer steals from the organization claiming that everybody does it; organizational roles cover over one's moral identity and lead one imperceptibly into taking on another persona in which wrongdoing is habitual. One opposes internal corruption by placing moral values in control over impulse, desire, inclination, passion, and appetite. One opposes external corruption by "going to the mat" in defense of moral value; one takes on the role of "giving voice to" moral value and moral considerations in organizational decisions, actions, and policies.

According to Aristotle, a virtue is "a state of character concerned with choice, lying in a mean, i.e., the mean relative to us, this being determined by a rational principle, and by that principle by which [a person] of practical wisdom would determine it." (From Ross's translation of the Nichomachean Ethics in 1106b, 36.) Characterizing integrity as a virtue emphasizes integrity's role in the choice of action in specific situations and in achieving consistency in choice of action throughout a professional career and even a lifetime. For Aristotle, moral virtue is characterized by a style of choice and career that consistently and even systematically avoids the vices of excess and defect. Integrity's vice of excess lies in action and habits that tend toward rigidity and inflexibility; here the agent holds to a position no matter what and does so even in the face of overwhelming evidence to the contrary; such a person falls prey to unreasonableness and irrationality. Integrity's other vice, its vice of defect, emerges when the individual acts as a moral chameleon, a hypocrite, or a wanton. (Martin Benjamin in Splitting the Difference vividly describes the hypocrite and moral chameleon; Frankfurt characterizes the moral wanton as the psychotic whose actions are so inconsistent and unconnected that they express no, underlying, unified character.) Alongside these vices of excesses and defect are the vices of internal and external corruption described just above; internal (psychological) and external (organizational) corruption break down the integration of value, habit, emotion, and belief that characterizes the moral agent.

3. Integrity as a Meta-Virtue, a virtue about the relation between virtues.

Many have characterized **integrity as a special kind of virtue, a meta-virtue**. In this case the subject matter of integrity consists of all the other virtues and how they fit in with one another. A person of integrity finds ways of integrating all the virtues so that she is truthful **and also** courageous, honorable **and also** humble, just **and also** compassionate. While there is nothing in the definition of the individual virtues that leads one to contradict another, in certain situations individual virtues become difficult to integrate. A strong sense of honor may lead one to act or appear arrogant; honor thus takes on the appearance of opposing humility because their integration in this situation is difficult. The fair and impartial judge may appear cold and devoid of compassion when she asserts justice over compassion in her decision. Integrity, because it pertains to all the virtues and to the relation in which they stand to one another, is a **meta-virtue**, one that posits the seamless

4. Ways for building integrity: strong evaluation and aligning first and second-order desires.

- In Charles Taylor's strong evaluation test, integrity emerges out of an intensive and radical examination of one's core self. This examination evaluates identity-conferring beliefs, emotions, attitudes, and projects in terms of different moral "horizons." Taylor's test is hermeneutical because one can never completely step outside of one's self when carrying out strong evaluation. Instead, one examines one part of the self using other parts that are kept provisionally outside the scope of criticism and examination. Then one reverses the poles of evaluation; what was formerly the target of strong evaluation now becomes the means of carrying out a new evaluation; and what provided the means of strong evaluation now becomes the target of a new evaluation. Because it is hermeneutical, strong evaluation is never complete; one is continually bootstrapping toward a more thoroughly understood and seamlessly integrated self by working toward higher and higher levels of refinement.
- Frankfurt also provides a test for integrity by distinguishing between first and second order desires. At the first level, I may desire to smoke a cigarette; I have been smoking for quite some time and feel a craving for one right now. Second-order desires evaluate first-order desires; I crave a smoke at the first level but now find smoking undesirable at the second level; second-order desires thus take an evaluative stance toward first-level desires. A new, moral goal has emerged that challenges me to reshape my first-order desires. I work to reduce my craving for a cigarette because I now find cigarettes undesirable; they are harmful, expensive, and annoy my friends. I take special measures to reduce my first order craving to align it with my second order project.

• In Taylor's test, integrity emerges from a continual, intensive, and radical evaluation of my self-system in terms of its central, identity-conferring content. In Frankfurt's test, integrity emerges as second-order desire motivates me to realign first-order desire.

5. Self-Deception, as put forth by Herbert Fingarette, presents an unusually strong challenge to integrity

Fingarette characterizes self-deception as the refusal to avow or acknowledge a part of oneself; one indirectly recognizes this undesirable part of the self but by refusing to "spell it out," one leaves it outside the unity of the self. Thus, self-deception arises from the failure to integrate all the constituents of the self. Furthermore, self-deception is a form of corruption, what Collingwood characterizes as a "corruption of consciousness." One attends to one element in the field of consciousness in order not to attend to another, undesirable element. This project of disattention permeates and corrupts what is attended to. The racist projects the undesired characteristics he disavows for himself upon the targeted group. This hatred of others is really a corrupt form of self-hatred, disguised by projecting the rejected parts of the self onto the external target of racist attitudes. The disavowal of self-deception can never be contained; refusing to integrate the disavowed element with the rest of the self leads to an eventual, overall disintegration of the self. For this reason, self-deception presents a singularly strong challenge to integrity.

Core Meaning or Root Metaphor(1,1)	Description(1,2)	Features(1,3)	Exercises on Integrity(1,4)	Cases(1,5)
Integration, Unity, or Wholeness: a person of integrity unifies character constituents into a single, coherent identity. Components integrated: emotion, thought, values, commitments, projects, beliefs, and attitudes. (2,1)	Integrity functions as a meta-virtue or a meta-value. This means that it prescribes coherence and consistency between the individual virtues of the character or the values that form the core of one's thought and conduct.(2,2)	Vices of excess: (a) rigidity and inflexibility (b) fanaticism or sticking to a position no matter what; (c) unreasonableness; (d)irrationality. (2,3)	Some use Milgram's experiments to argue that situation determines character and action. There are, according to this position, no transsituational character disposition or traits.(2,4)	Nathaniel Borenstein reformulates and reintegrates his pacifist beliefs (without abandoning them) to help NATO develop a missile launch training program not embedded in the actual launching system.(2,5)
Consistency of action across situations that	Integrity is often characterized as a virtue, that is,	Vice of Defect: moral chameleon, hypocrite, and	Some conclude from Zimbardo's	Jim and the Jungle: Utilitarianism

follows from a fully synthesized and integrated character. The same character trait, disposition, or habit is displayed across different kinds of situations.(3,1)	as an excellence of character, thought, and action. Character is formed around four Cardinal Virtues: Prudence, Justice, Fortitude, and Temperance. (Taken from the Encyclopedia of Catholicism) (3,2)	wanton. (See Frankfurt and Benjamin on these types of defect.)(3,3)	prison experiments that identity dissolves into the role one is playing. The students role- playing in his experiment as prisoners and as prison guards become so lost in their roles that they lose their sense of identity.(3,4)	and Deontology may dictate that one shoot the villager or leave the scene but they do not properly take into account the cost of either action on personal integrity.(3,5)
Commitment: a person of integrity has central beliefs and values to which he or she remains faithful. He or she has something to believe in and thus stands out as a "person of conviction." (4,1)	According to Aristotle, a virtue is "a state of character concerned with choice, lying in a mean, i.e., the mean relative to us, this being determined by a rational principle, and by that principle by which [a person] of practical wisdom would determine it." (From Ross's translation of the Nichomachean Ethics in 1106b, 36.)(4,2)	Vices of Corruption: External disintegration of organizational, group, or collective integrity or unity(4,3)	Strong Evaluation Test: Is it possible to subject core self to rigorous self- examination? Difficulty: Finding an Archimedean point.(4,4)	George the Pacifist: George does not want to work on a weapons project because it violates his strong, core beliefs in pacifism. But he is unemployed and his wife needs to quit her waitress job to go back to school and be with the children.(4,5)
Incorruptible: The coherence or solidity of one's core self can stand up to disruptive pressures such as extraneous desire or pressure from the outside.(5,1)	As a virtue, integrity is the mean between extremes of excess and defect.(5,2)	Internal Vice of Corruption: Disintegration of individual integrity or unity/cohesion of character(5,3)	Consistency of first with second-order desires: Frankfort posits the existence of two levels of desire, first/immediate and second/mediate. The gambler gives way to	A Man for All Seasons: Play author, Robert Bolt, presents Thomas More as a paradigm of integrity. Susan Wolf, on the other hand, presents him

	first-order desire to keep on gambling. But second- order desire, opposes the first, and advocates a project to stop gambling. (At which level does the true self arise?) Integrity = aligning first with second order desires. (5,4)	as a religious fanatic. Would More lose his integrity if he signed the oath?(5,5)
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Summary Table on Integrity

What you are going to do.

Exercise I: Does Character Exist?

The following is quoted from Gilbert Harmon's article, "The Nonexistence of Character Traits."

Virtue ethicists do not and need not argue that most people are indeed virtuous or could in principle become virtuous' (Athanassoulis, 1999). But if we know that there is no such thing as a character trait and we know that virtue would require having character traits, how can we aim at becoming a virtuous agent? If there are no character traits, there is nothing one can do to acquire character traits that are more like those possessed by a virtuous agent.

Examine each of the premises set forth in this argument.

- Is it the case that there is no such thing as a character trait? (For example, do the Milgram experiments show that character traits displayed in one situation disappear when one enters into a different situation? Does the fact that a significant minority of subjects refused to continue in the experiment provide evidence that it is possible to develop robust character traits or is this just a matter of luck?)
- Does virtue ethics rest on the assumption that there are robust, trans-situational character traits? (Do robust character traits have a basis in nature? Can these be developed by, say, practicing to the point of becoming "second nature?")
- In other words, does the inconsistency of action across situations displayed in the Milgram experiments undermine the claim that virtue ethics is possible?

Exercise II: Must George sacrifice his integrity to meet his family's needs?

George is a chemist. He recently received a Ph.D. in this area and demonstrated considerable skill and knowledge in a highly specialized and sought after area of this discipline. But George is also unemployed. His wife has had to quit school and work as a waitress. They have two children and, even though George shares care-giving and domestic duties with his wife, it would be better if his wife could quit her job, go back to school, and have more time to be with her children. Finally, George is a pacifist. Since his expertise in Chemistry has military applications (specifically in the development of weapons in chemical warfare), it is

possible for George to find work but only in positions that go against his pacifist beliefs. George's friend, Antonio, informs him of a job possibility with Mega Weapons, a company whose revenues come primarily from government military defense projects. Antonio can get George an interview with Mega Weapons, and, given the scarcity of people with George's expertise, this interview will probably result in a well-paying job. George however expresses concern with taking on such a job given that it would go against his pacifist beliefs. George is highly committed as a pacifist; these beliefs have been integrated into his core self system.

- Should George set aside his pacifist beliefs in order to carry out his family responsibilities?
- Under what conditions would setting aside his pacifist beliefs undermine George's integrity?
- By sticking to his pacifist beliefs and refusing to pursue this job opportunity, is George falling into the vice of excess, fanaticism and unreasonableness?
- If George sets aside his pacifism and takes a job with Mega Weapons, does he fall into the vice of defect, namely, does he become a hypocrite or a moral chameleon?

Exercise III: Is there such a thing as unity of character and unity of virtue?

Ouestions

Codes of ethics in engineering enjoin engineers to associate only with individuals of "good character."

- Why is this important? For example, if one associated with individuals of bad character, would this corrupt one's own character?
- Take a field from the following list: engineering, business, government, science, agriculture. What would be the attributes or traits that would designate one as having a good character within this field? What kind of things would one do? What kind of person would one be? Do you know of anyone in your field that you would consider a good character? A bad character?
- Imagine an engineer who exhibits the characteristics that you have used to define an engineer of good character. Now imagine that, even though married with children, this individual had an extramarital affair. Would this additional fact diminish your estimation of this individual as one of good character?
- The view that one must have all the virtues to be good is a position called the "unity of the virtues" and it has been attributed to Aristotle. Is this necessarily true? In order to be a good business person, must one also be virtuous in one's family life? Did President Clinton's affair with Monica Lewinski diminish his performance and integrity as president?

Exercise IV: Saints of Selfhood, Persons for all Seasons, and Dirty Hands

- Robert Bolt's play, A Man For All Seasons, portrays Thomas More as a "saint of selfhood." More and several other characters express different modes of selfhood through how they respond to a single, vital political issue of their time.
- Henry VIII took Catherine of Spain as his first wife. To do so he had to receive a special dispensation
 from the Pope because she was previously married; this previous marriage and the Catholic Church
 prohibition of remarriage thus created the necessity of receiving special permission from the Catholic
 hierarchy.
- But after several years of marriage to Henry, Catherine had failed to give birth to a son; Henry became obsessed with the fact that there was still no heir to the throne of England. In the meantime, Henry had fallen in love with Lady Anne Boleyn and wanted to marry her. He felt that Catherine's barrenness was punishment from God for the illegitimacy of the marriage. He was also confident that Anne, who was younger, could bear him a son. Now Henry went to the Pope asking him to "dispense with his dispensation," declare the marriage to Catherine null and void, and give consent to the new marriage to Anne Boleyn. The Pope refused.
- Henry went on with this second marriage in defiance of the Pope. Eventually this led the Church of England to separate itself from the Church of Rome. But Henry's more immediate problem was dealing

with opposition to the marriage arising from English citizens faithful to the Catholic Church and Rome. Henry felt that this opposition represented illegitimate interference in the political affairs of England on the part of outsiders. To ferret them out, Henry demanded that all citizens take an oath of loyalty which affirmed the illegality of Henry's marriage to Catherine, the legitimacy of the marriage to Anne Boleyn, and the acceptance the children she bore Henry as the legitimate heirs to the throne of England.

• A series of larger political and religious issues "telescoped" themselves into this familial problem. (1) What is the relation between the Catholic Church and the State of England? (2) How could Henry's successor be determined and legitimized? (3) How could Henry's succession be planned out so as to avoid civil conflict and civil war? (4) How could conscientious citizens of England reconcile their political obligations with their religious faith? All of this entailed that Henry's oath required all of those taking it to choose between Church and State. If one had integrated religious beliefs into one's self-system, then this choice translated into the alternatives of self-affirmation and self-denial.

Your task in this exercise is to explore the different approaches to integrity taken by four characters in Bolt's play: Thomas More, Thomas Cromwell, Richard Rich, and Thomas Howard, the Duke Norfolk. How does each approach this situation? Does the character's approach preserve or betray integrity? Is preserving integrity compatible with compromises like the one suggested by Norfolk: take the oath and publicly affirm the legitimacy of the marriage while internally and privately denying its legitimacy? How does one preserve integrity and avoid betraying or abandoning one's deepest self as outlined by strong religious and political convictions?

1. Thomas More

- More refused to take the oath. For him, an oath is an especially strong promise, made before God, in which one offers one's very self as guarantee. Accepting Norfolk's proposal, publicly affirming the marriage while privately and internally repudiating it had very real consequences for More that would result in the loss of self, the betrayal of conscience, and the destruction of his "moral compass." As More put it at one point, abandoning one's conscience for the sake of political expedience was the sure road to political corruption and chaos. While Bolt portrays More as a "saint of selfhood," Susan Wolf (in her historical novel on Cromwell) presents him as a religious fanatic, one who would hold to religious dogma even to the point of civil war and social destruction.
- **Question**: Is More a saint of selfhood or a religious fanatic?

2. Richard Rich

- Rich begins as an admirer of More. But he is also ambitious, so when More refused him a political appointment, Rich found a new patron in the Machiavellian politician, Thomas Cromwell. (More did offer Rich a teaching post, but this clearly was not enough to satisfy Rich's political ambitions.) Rich's career advanced nicely through Cromwell's patronage but at a price to personal integrity. To get his first appointment, Cromwell asked Rich to provide incriminating evidence against More. Rich found this betrayal difficult but after pressure from Cromwell, gave in. Cromwell assured him that it will be easier next time. Rich proceeded step-by-step toward the point where he was able to betray More and convict him of treason by perjuring himself as a witness; he falsely testified that More declined to take the loyalty oath for treasonous reasons. More told Rich that he had lost his soul with this lie but Rich eventually rose to the exalted position of Chancellor of England.
- **Questions**: Did Rich betray More? Did Rich abandon integrity for personal gain? Or were Rich's actions an appropriate political response to More's religious fanaticism?

3. Thomas Cromwell

Thomas Cromwell described himself as a civil servant devoted to the king, whoever he was. Thus his
position could be characterized as uncritical loyalty. If the king wished for something, then Cromwell
asserted that it was his duty to see to it that he got it. Cromwell's special talent was removing political
and bureaucratic obstacles. If his means seemed extreme (he prosecuted More for treason and brought
about his execution), Cromwell justified these by the legitimacy of the ends they were meant to bring

about. Henry, for Cromwell, was more than just a man; he was the King of England and his desires could be re-described as the collective and common good of the people of England. Cromwell, thus, sided with the political side of the Church vs. State dispute. He saw his actions as the proper political response to More's religious fanaticism.

• **Questions**: Did Cromwell preserve or abandon integrity through his actions? To what extent do legitimate political ends justify taking extreme administrative measures? Is it necessary to "dirty one's hands" in order to realize social and political goods as well as to avoid political disasters like civil war? At one point, More affirmed that he would like to see England's affairs "governed by prayer." Does Cromwell represent the practical antidote to this utopianism?

4. Norfolk

- Norfolk belonged to the English aristocracy and his family had its own claim to the English throne. Yet, as Norfolk confessed to More, the aristocracy caved in to Henry on the matter of the marriage in order to protect its own position and secure its important position in the English familial hierarchy. Norfolk conceded that Henry was wrong but that this was irrelevant. Because Henry had the power to do what he wanted, it would be useless for the aristocracy to oppose him. They should wait for Henry to die and then assert themselves in the power struggle that would follow his death. If this resulted in civil war, then so be it. In the meantime, More should join the aristocracy and take the oath for fellowship if for nothing else.
- **Questions**: How does Norfolk's position stand in regard to integrity? Consider the values of the English aristocracy: honor, tradition, courage, and fortitude. Did Norfolk remain true to these aristocratic values? Can these values be temporarily set aside in the face of the superior power of one particular aristocratic family, the Tudors?

Imagine a continuum between integrity, on the one end, and insincerity, corruption, and betrayal on the other. Now arrange these characters on this continuum. Who would you consider a saint of integrity? Who do you feel best falls on the opposite end of the scale? Can you invent any strategies for preserving personal integrity in the face of such a polarized political debate?

Works Pertinent to Integrity

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